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| | | |
|--------------|----|---|
| NEWS | 1 | Web Page URLs for STN Seminar Schedule - N. America |
| NEWS | 2 | "Ask CAS" for self-help around the clock |
| NEWS | 3 | May 12 EXTEND option available in structure searching |
| NEWS | 4 | May 12 Polymer links for the POLYLINK command completed in REGISTRY |
| NEWS | 5 | May 27 New UPM (Update Code Maximum) field for more efficient patent SDIs in CAplus |
| NEWS | 6 | May 27 CAplus super roles and document types searchable in REGISTRY |
| NEWS | 7 | Jun 28 Additional enzyme-catalyzed reactions added to CASREACT |
| NEWS | 8 | Jun 28 ANTE, AQUALINE, BIOENG, CIVILENG, ENVIROENG, MECHENG, and WATER from CSA now available on STN(R) |
| NEWS | 9 | Jul 12 BEILSTEIN enhanced with new display and select options, resulting in a closer connection to BABS |
| NEWS | 10 | Jul 30 BEILSTEIN on STN workshop to be held August 24 in conjunction with the 228th ACS National Meeting |
| NEWS | 11 | AUG 02 IFIPAT/IFIUDB/IFICDB reloaded with new search and display fields |
| NEWS | 12 | AUG 02 CAplus and CA patent records enhanced with European and Japan Patent Office Classifications |
| NEWS | 13 | AUG 02 STN User Update to be held August 22 in conjunction with the 228th ACS National Meeting |
| NEWS | 14 | AUG 02 The Analysis Edition of STN Express with Discover! (Version 7.01 for Windows) now available |
| NEWS | 15 | AUG 04 Pricing for the Save Answers for SciFinder Wizard within STN Express with Discover! will change September 1, 2004 |
| NEWS EXPRESS | | JULY 30 CURRENT WINDOWS VERSION IS V7.01, CURRENT MACINTOSH VERSION IS V6.0c(ENG) AND V6.0Jc(JP), AND CURRENT DISCOVER FILE IS DATED 11 AUGUST 2004 |
| NEWS HOURS | | STN Operating Hours Plus Help Desk Availability |
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| NEWS WWW | | CAS World Wide Web Site (general information) |

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FILE 'HOME' ENTERED AT 14:54:10 ON 24 AUG 2004

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=> file reg
COST IN U.S. DOLLARS
SINCE FILE          TOTAL
ENTRY           SESSION
0.21            0.21
FULL ESTIMATED COST
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FILE 'REGISTRY' ENTERED AT 14:54:19 ON 24 AUG 2004
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 provided by InfoChem.

STRUCTURE FILE UPDATES: 23 AUG 2004 HIGHEST RN 731771-88-3
 DICTIONARY FILE UPDATES: 23 AUG 2004 HIGHEST RN 731771-88-3

TSCA INFORMATION NOW CURRENT THROUGH MAY 21, 2004

Please note that search-term pricing does apply when
 conducting SmartSELECT searches.

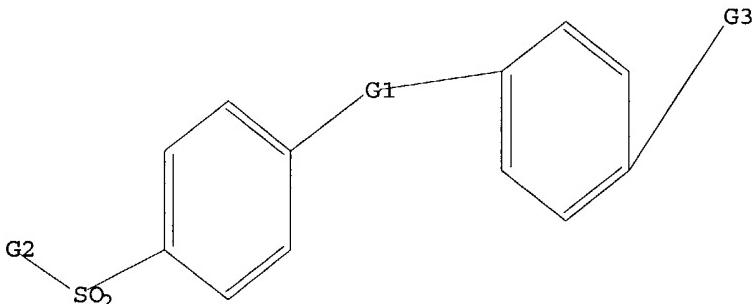
Crossover limits have been increased. See HELP CROSSOVER for details.

Experimental and calculated property data are now available. For more
 information enter HELP PROP at an arrow prompt in the file or refer
 to the file summary sheet on the web at:
<http://www.cas.org/ONLINE/DBSS/registryss.html>

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=>
Uploading c:\program files\stnexp\queries\10771861.6
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L1 STRUCTURE UPLOADED

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=> d l1
L1 HAS NO ANSWERS
L1             STR
```



G1 Cb,Cy,Hy

G2 N,NH,NH2,Ak

G3 Cy,Hy

Structure attributes must be viewed using STN Express query preparation.

=> s l1 sss full

10771861.6Page 3

FULL SEARCH INITIATED 14:54:41 FILE 'REGISTRY'
FULL SCREEN SEARCH COMPLETED - 855006 TO ITERATE

46.8% PROCESSED 400000 ITERATIONS
INCOMPLETE SEARCH (SYSTEM LIMIT EXCEEDED)
SEARCH TIME: 00.00.12

63 ANSWERS

FULL FILE PROJECTIONS: ONLINE **INCOMPLETE**
BATCH **INCOMPLETE**
PROJECTED ITERATIONS: 855006 TO 855006
PROJECTED ANSWERS: 100 TO 168

L2 63 SEA SSS FUL L1

| COST IN U.S. DOLLARS | SINCE FILE ENTRY | TOTAL SESSION |
|----------------------|------------------|---------------|
| FULL ESTIMATED COST | 155.42 | 155.63 |

FILE 'CAPLUS' ENTERED AT 14:54:59 ON 24 AUG 2004
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FILE COVERS 1907 - 24 Aug 2004 VOL 141 ISS 9
FILE LAST UPDATED: 23 Aug 2004 (20040823/ED)

This file contains CAS Registry Numbers for easy and accurate substance identification.

=> s 12
L3 19 L2

=> d 13 fbib hitstr abs total

L3 ANSWER 1 OF 19 CAPLUS COPYRIGHT 2004 ACS on STN
AN 2004:303289 CAPLUS
DN 141:54156
TI 2,3-Diarylpyran-4-ones: a new series of selective cyclooxygenase-2 inhibitors
AU Joo, Yung Hyup; Kim, Jin Kwan; Kang, Seon-Hwa; Noh, Min-Soo; Ha, Jun-Yong;
Choi, Jin Kyu; Lim, Kyung Min; Chung, Shin
CS Pharmaceutical & Health Research Institute, Drug Discovery, AmorePacific Corporation R&D Center, Kyounggi-do, 449-729, S. Korea
SO Bioorganic & Medicinal Chemistry Letters (2004), 14(9), 2195-2198
CODEN: BMCL8; ISSN: 0960-894X
PB Elsevier Science B.V.

DT Journal

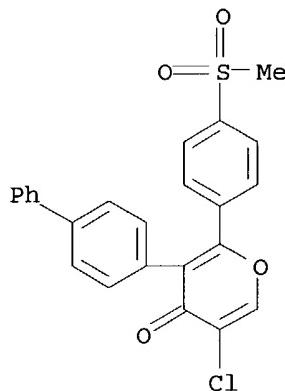
LA English

IT 708244-51-3P 708244-72-8P

RL: PAC (Pharmacological activity); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation)
 (preparation of 2,3-diarylpyran-4-ones as cyclooxygenase-2 inhibitors and oral antiinflammatory agents)

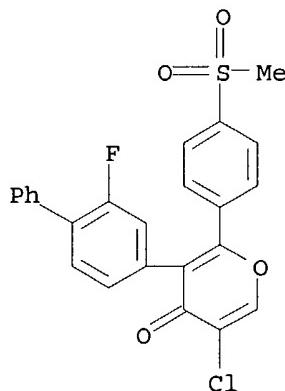
RN 708244-51-3 CAPLUS

CN 4H-Pyran-4-one, 3-[1,1'-biphenyl]-4-yl-5-chloro-2-[4-(methylsulfonyl)phenyl]- (9CI) (CA INDEX NAME)



RN 708244-72-8 CAPLUS

CN 4H-Pyran-4-one, 5-chloro-3-(2-fluoro[1,1'-biphenyl]-4-yl)-2-[4-(methylsulfonyl)phenyl]- (9CI) (CA INDEX NAME)



AB A new series of cyclooxygenase-2 (COX-2) inhibitors with γ -pyrone as central scaffold unit has been synthesized and their biol. activities were evaluated against cyclooxygenase inhibitory activity. The changes of phys. properties of the mols. were performed according to the medicinal chemical principles and moderate oral antiinflammatory activity was obtained with this series of inhibitors.

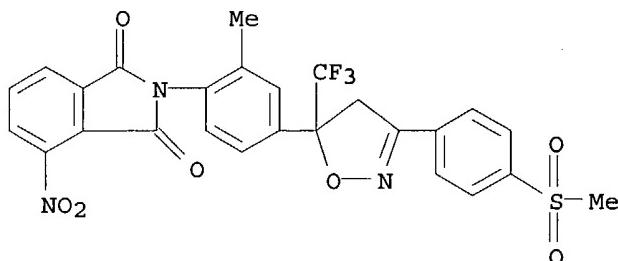
RE.CNT 13 THERE ARE 13 CITED REFERENCES AVAILABLE FOR THIS RECORD
 ALL CITATIONS AVAILABLE IN THE RE FORMAT

L3 ANSWER 2 OF 19 CAPLUS COPYRIGHT 2004 ACS on STN

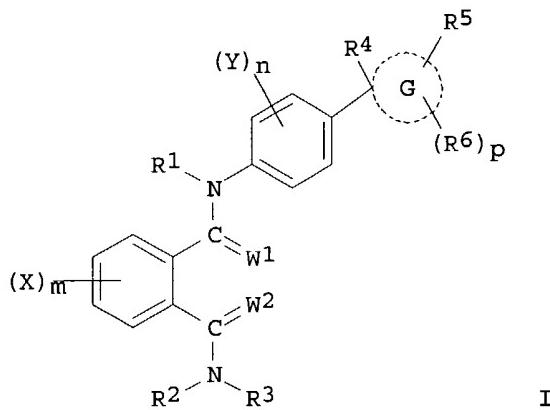
AN 2004:182828 CAPLUS
 DN 140:217657
 TI Preparation of N-(4-heterocyclphenyl)phthalic acid diamide compounds as pest control agents
 IN Mita, Takeshi; Kudo, Yoshihiro; Mizukoshi, Takashi; Hotta, Hiroyasu; Maeda, Kazushige; Takii, Shinji
 PA Nissan Chemical Industries, Ltd., Japan
 SO PCT Int. Appl., 634 pp.
 CODEN: PIXXD2
 DT Patent
 LA Japanese
 FAN.CNT 1

| | PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|----|---|------|----------|-----------------|------------|
| PI | WO 2004018410 | A1 | 20040304 | WO 2003-JP10708 | 20030825 |
| | W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, KE, KG, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM | | | | |
| | RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG | | | JP 2002-244619 | A 20020826 |
| | | | | JP 2002-281294 | A 20020926 |
| | | | | JP 2002-344987 | A 20021128 |
| | | | | JP 2003-83371 | A 20030325 |
| | | | | JP 2003-182013 | A 20030626 |

OS MARPAT 140:217657
 IT 666746-24-3P
 RL: AGR (Agricultural use); BSU (Biological study, unclassified); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation); USES (Uses)
 (preparation of N-(4-heterocyclphenyl)phthalic acid diamide compds. as pest control agents such as insecticides and acaricides)
 RN 666746-24-3 CAPLUS
 CN 1H-Isoindole-1,3(2H)-dione, 2-[4-[4,5-dihydro-3-[4-(methylsulfonyl)phenyl]-5-(trifluoromethyl)-5-isoxazolyl]-2-methylphenyl]-4-nitro- (9CI) (CA INDEX NAME)



GI



AB 4'-Heterocyclylbenzanilides [I; G = 5- or 6-membered nonarom. heterocyclyl containing at least one atom selected from O, S, and N and at least one double bond, 5- or 6-membered saturated heterocyclyl containing 2 atoms selected from O,

S, and N, 3- to 6-membered cycloalkyl; W1, W2 = O, S; X = halo, cyano, NO₂, N₃, -SCN, SF₅, each (un)substituted C₁-6 alkyl, C₃-8 cycloalkyl, C₂-6 alkenyl, C₂-6 alkynyl, or OH, C₃-8 cycloalkenyl, C₃-8 halocycloalkenyl, SH, etc.; Y = halo, cyano, NO₂, N₃, -SCN, SF₅, each (un)substituted C₁-6 alkyl, C₃-8 cycloalkyl, Ph, OH, or NH₂, SH, etc.; R₁, R₂, R₃ = H, cyano, each (un)substituted C₁-12 alkyl, C₃-12 cycloalkyl, C₃-12 alkenyl, C₃-12 alkynyl, PhO, phenyl-C₁-4 alkoxy, PhS, or Ph, C₃-12 cycloalkenyl, C₃-12 halocycloalkenyl, C₁-6 alkylthio, C₁-6 haloalkylthio, etc.; R₄ = H, halo, cyano, each (un)substituted C₁-6 alkyl, C₁-6 haloalkyl, C₃-8 cycloalkyl, Ph, or OH, C₃-6 alkenyl, C₃-6 haloalkenyl, C₃-6 alkynyl, C₃-6 haloalkyl, 1-naphthyl, 2-naphthyl, etc.; R₅ = H, halo, cyano, each (un)substituted C₁-6 alkyl, C₁-6 haloalkyl, C₃-8 cycloalkyl, C₃-8 halocycloalkyl, or OH, C₃-6 alkenyl, C₃-6 haloalkenyl, C₃-6 alkynyl, C₃-6 haloalkynyl, etc.; R₆ = H, halo, cyano, each (un)substituted C₁-6 alkyl, C₁-6 haloalkyl, C₃-8 cycloalkyl, C₃-8 halocycloalkyl, or Ph, C₁-6 alkoxy, C₁-6 haloalkoxy, 1-naphthyl, 2-naphthyl, etc.; m, n = an integer of 0-4; p = an integer of 0-9] or salts thereof. Also disclosed is a novel agricultural chemical, especially

an insecticide or acaricide containing the compound I as the active ingredient. For example, N₁-[4-[3-(4-fluorophenyl)-5-trifluoromethyl-4,5-dihydroisoxazol-5-yl]-2-methylphenyl]-3-nitro-N₂-isopropylphthalimide and N₁-[4-[6-(4-chlorophenyl)-2-methyl-4-trifluoromethyl-3,4-dihdropyrimidin-4-yl]-2-methylphenyl]-3-iodo-N₂-isopropylphthalimide at 100 ppm controlled ≥80% 2nd instar larvae of Spodoptera litura on cabbage leaves.

RE.CNT 10 THERE ARE 10 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L3 ANSWER 3 OF 19 CAPLUS COPYRIGHT 2004 ACS on STN
AN 2003:836766 CAPLUS
DN 139:350731
TI Preparation of 1-phenyl-1H-pyrazoles for inducing apoptosis in proliferating cells
IN Chen, Ching-shin; Song, Xueqin; Lin, Ho-pi
PA The Ohio State University Research Foundation, USA

SO PCT Int. Appl., 83 pp.

CODEN: PIXXD2

DT Patent

LA English

FAN.CNT 1

| | PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|----|--|------|----------|-----------------|------------|
| PI | WO 2003086287 | A2 | 20031023 | WO 2003-US10738 | 20030408 |
| | WO 2003086287 | A3 | 20040325 | | |
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CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH,
GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR,
LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NI, NO, NZ, OM,
PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, TJ, TM, TN, TR, TT,
TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW, AM, AZ, BY, KG, KZ,
MD, RU, TJ, TM
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AT, BE, BG,
CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC,
NL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ,
GW, ML, MR, NE, SN, TD, TG | | | US 2002-370664P | P 20020408 |
| | US 2003236294 | A1 | 20031225 | US 2003-409502 | 20030408 |
| | | | | US 2002-370664P | P 20020408 |

OS MARPAT 139:350731

IT 618068-95-4P 618068-99-8P 618069-00-4P

618069-08-2P 618069-09-3P 618069-10-6P

618069-11-7P 618069-12-8P 618069-13-9P

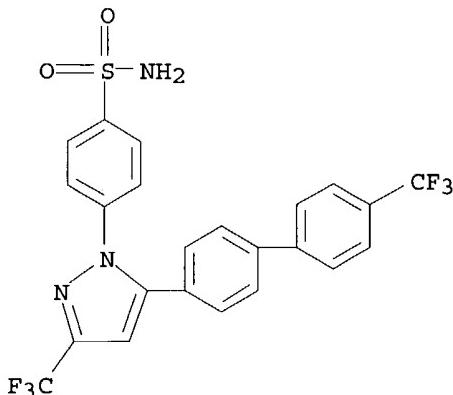
618069-14-0P 618069-15-1P

RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(antiproliferative agent; preparation of 1-Ph-1H-pyrazoles for inducing apoptosis in proliferating cells)

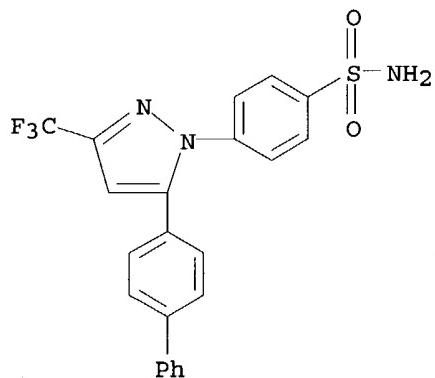
RN 618068-95-4 CAPPLUS

CN Benzenesulfonamide, 4-[3-(trifluoromethyl)-5-[4'-(trifluoromethyl)[1,1'-biphenyl]-4-yl]-1H-pyrazol-1-yl] - (9CI) (CA INDEX NAME)



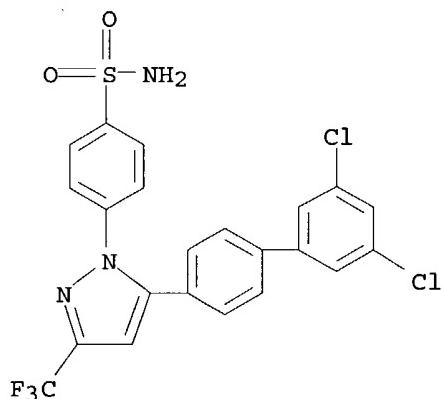
RN 618068-99-8 CAPPLUS

CN Benzenesulfonamide, 4-[5-[1,1'-biphenyl]-4-yl-3-(trifluoromethyl)-1H-pyrazol-1-yl] - (9CI) (CA INDEX NAME)



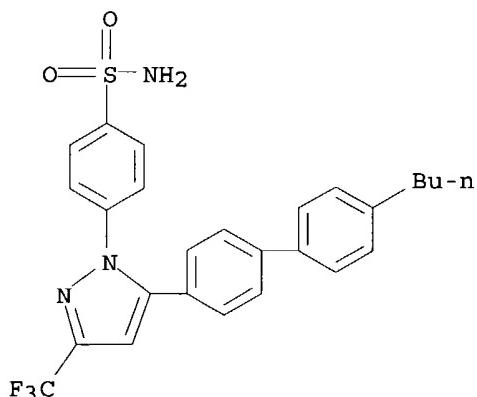
RN 618069-00-4 CAPLUS

CN Benzenesulfonamide, 4-[5-(3',5'-dichlorobiphenyl)-3-(trifluoromethyl)-1H-pyrazol-1-yl]- (9CI) (CA INDEX NAME)



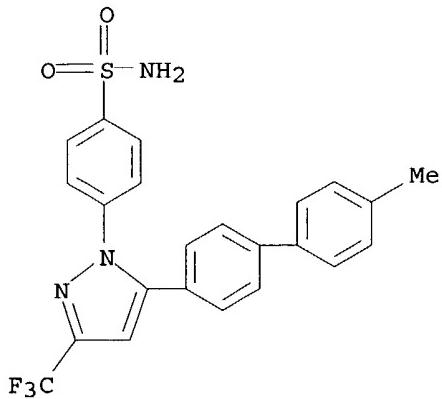
RN 618069-08-2 CAPLUS

CN Benzenesulfonamide, 4-[5-(4'-butylbiphenyl)-3-(trifluoromethyl)-1H-pyrazol-1-yl]- (9CI) (CA INDEX NAME)



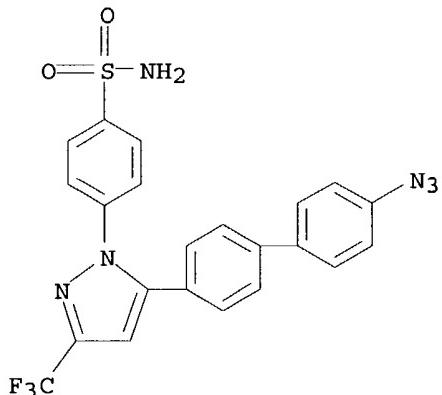
RN 618069-09-3 CAPLUS

CN Benzenesulfonamide, 4-[5-(4'-methyl[1,1'-biphenyl]-4-yl)-3-(trifluoromethyl)-1H-pyrazol-1-yl]- (9CI) (CA INDEX NAME)



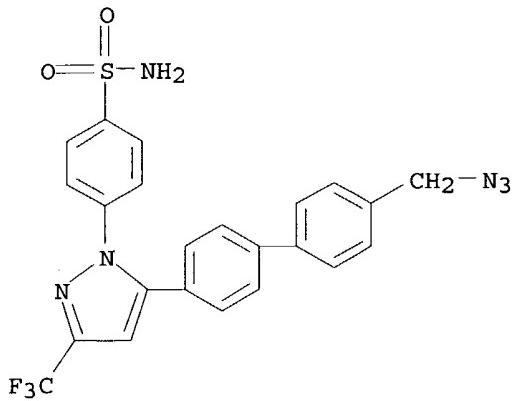
RN 618069-10-6 CAPLUS

CN Benzenesulfonamide, 4-[5-(4'-azido[1,1'-biphenyl]-4-yl)-3-(trifluoromethyl)-1H-pyrazol-1-yl]- (9CI) (CA INDEX NAME)



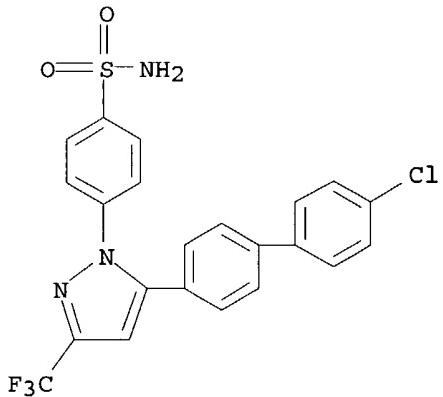
RN 618069-11-7 CAPLUS

CN Benzenesulfonamide, 4-[5-[4'-(azidomethyl)[1,1'-biphenyl]-4-yl]-3-(trifluoromethyl)-1H-pyrazol-1-yl]- (9CI) (CA INDEX NAME)



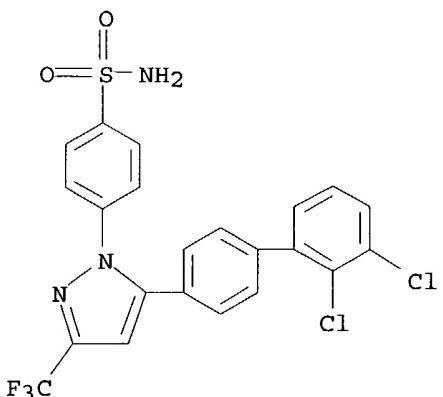
RN 618069-12-8 CAPLUS

CN Benzenesulfonamide, 4-[5-(4'-chlorobiphenyl)-4-yl]-3-(trifluoromethyl)-1H-pyrazol-1-yl]-(9CI) (CA INDEX NAME)



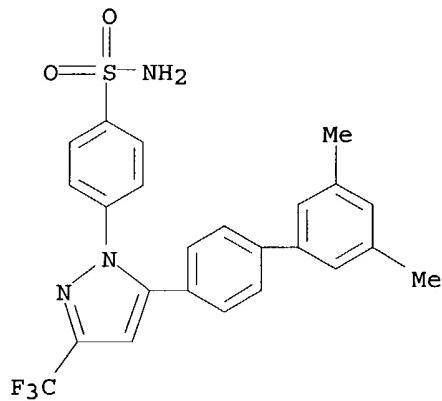
RN 618069-13-9 CAPLUS

CN Benzenesulfonamide, 4-[5-(2',3'-dichlorobiphenyl)-4-yl]-3-(trifluoromethyl)-1H-pyrazol-1-yl]-(9CI) (CA INDEX NAME)



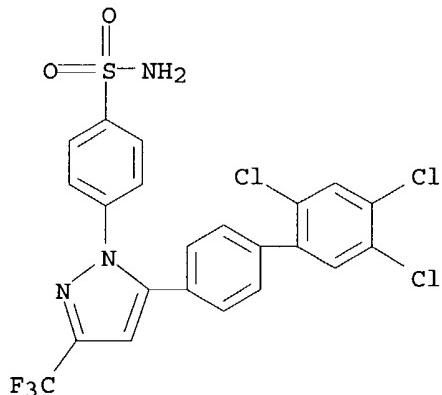
RN 618069-14-0 CAPLUS

CN Benzenesulfonamide, 4-[5-(3',5'-dimethyl[1,1'-biphenyl]-4-yl)-3-(trifluoromethyl)-1H-pyrazol-1-yl]- (9CI) (CA INDEX NAME)

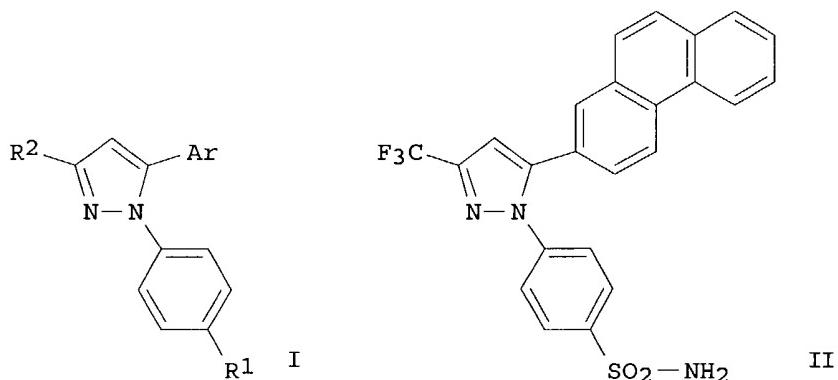


RN 618069-15-1 CAPLUS

CN Benzenesulfonamide, 4-[5-(2',4',5'-trichloro[1,1'-biphenyl]-4-yl)-3-(trifluoromethyl)-1H-pyrazol-1-yl]- (9CI) (CA INDEX NAME)



GI



AB Title compds. I [wherein R1 = carboxamido; R2 = (halo)alkyl; Ar = (un)substituted Ph biphenyl, naphthyl, anthryl, phenanthrenyl, or fluorenyl; and pharmaceutically acceptable salts thereof] were prepared and tested for their effects on cyclooxygenase-2 (COX-2) activity, the viability of human prostate cancer PC-3 cells, and their ability to induce apoptosis in these cells. For example, Claisen condensation of 2-acetylphenanthrene with Et trifluoroacetate in the presence of NaH afforded the 1,3-keto-enol derivative (95%). Reaction with (4-sulfamoylphenyl)hydrazine•HCl in EtoH gave 4-[5-(2-phenanthrenyl)-3-(trifluoromethyl)-1H-pyrazol-1-yl]benzenesulfonamide (II) in 65% yield. A structure-activity anal. of derivs. of the COX-2 inhibitor celecoxib found no correlation between the COX-2 inhibitory and apoptosis-inducing activities. For instance, increased polarity or bulkiness of the terminal Ph ring reduced the ability of compds. to inhibit COX-2, while a certain degree of bulkiness and hydrophobicity in the substituted Ph ring was highly desirable for apoptosis induction in PC-3 cells. Thus, I are useful for inducing apoptosis in proliferating cells, particularly cancer cells, including but not limited to prostate cancer, leukemia, non-small cell lung cancer, colon cancer, CNS cancer, melanoma, ovarian cancer, renal cancer, bladder cancer, lymphoma, and breast cancer. These compds. are particularly useful in the treatment of androgen-independent cancers, including hormone-refractory prostate cancer.

L3 ANSWER 4 OF 19 CAPLUS COPYRIGHT 2004 ACS on STN

AN 2003:777577 CAPLUS

DN 139:286336

TI Medicinal composition containing inhibitor of decomposition of extracellular matrix of cartilage

IN Gemba, Takefumi; Okamoto, Hiroyuki; Watanabe, Fumihiro

PA Shionogi & Co., Ltd., Japan

SO PCT Int. Appl., 101 pp.

CODEN: PIXXD2

DT Patent

LA Japanese

FAN.CNT 1

| | PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|----|---------------|---|----------|-----------------|----------|
| PI | WO 2003080042 | A1 | 20031002 | WO 2003-JP3673 | 20030326 |
| | W: | AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NI, NO, NZ, OM, PH, | | | |

PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, TJ, TM, TN, TR, TT, TZ,
 UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW, AM, AZ, BY, KG, KZ, MD,
 RU, TJ, TM

RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AT, BE, BG,
 CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC,
 NL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ,
 GW, ML, MR, NE, SN, TD, TG

JP 2002-87330 A 20020327

OS MARPAT 139:286336

IT 607719-52-8P 607719-58-4P 607719-60-8P

607719-61-9P 607719-62-0P 607719-63-1P

607719-64-2P

RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU
 (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES
 (Uses)

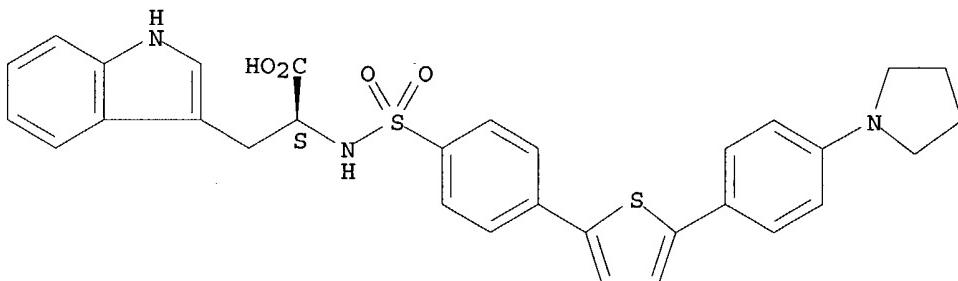
(medicinal composition containing inhibitor of decomposition of
 extracellular matrix

of cartilage and preparation of said inhibitor)

RN 607719-52-8 CAPLUS

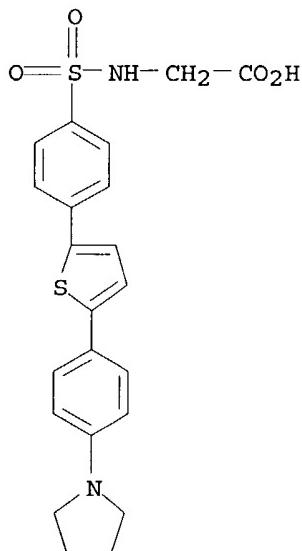
CN L-Tryptophan, N-[[4-[5-[4-(1-pyrrolidinyl)phenyl]-2-thienyl]phenyl]sulfonyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



RN 607719-58-4 CAPLUS

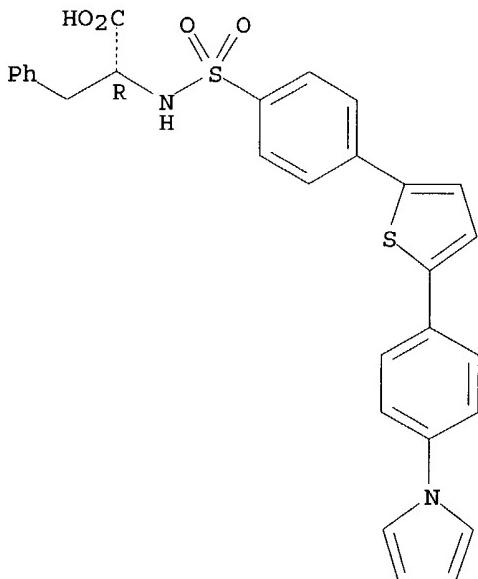
CN Glycine, N-[[4-[5-[4-(1-pyrrolidinyl)phenyl]-2-thienyl]phenyl]sulfonyl]- (9CI) (CA INDEX NAME)



RN 607719-60-8 CAPLUS

CN D-Phenylalanine, N-[4-[5-[4-(1H-pyrrol-1-yl)phenyl]-2-thienyl]phenyl]sulfonyl] - (9CI) (CA INDEX NAME)

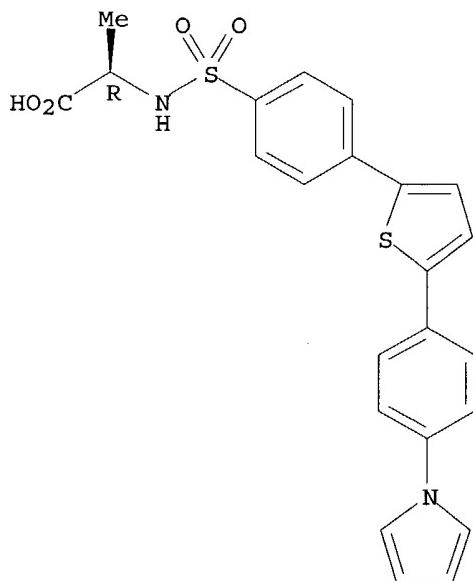
Absolute stereochemistry.



RN 607719-61-9 CAPLUS

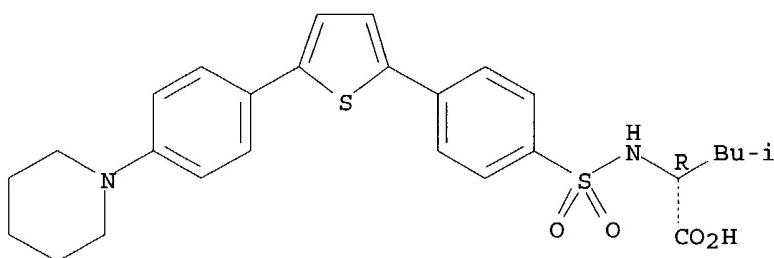
CN D-Alanine, N-[4-[5-[4-(1H-pyrrol-1-yl)phenyl]-2-thienyl]phenyl]sulfonyl] - (9CI) (CA INDEX NAME)

Absolute stereochemistry.



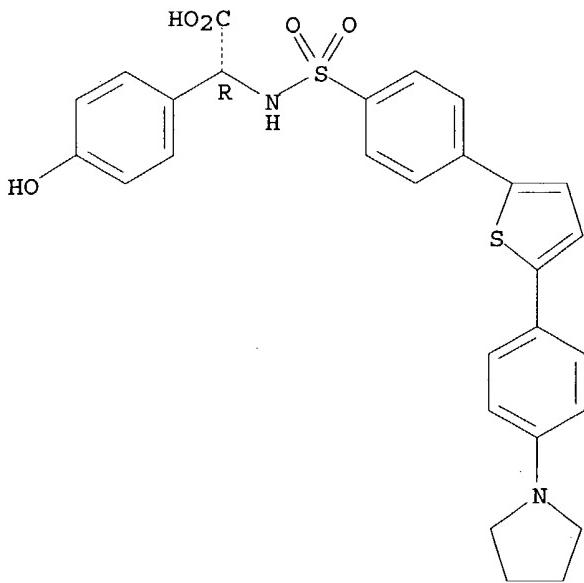
RN 607719-62-0 CAPLUS
CN D-Leucine, N-[[4-[5-[4-(1-piperidinyl)phenyl]-2-thienyl]phenyl]sulfonyl] -
(9CI) (CA INDEX NAME)

Absolute stereochemistry.



RN 607719-63-1 CAPLUS
CN Benzeneacetic acid, 4-hydroxy- α -[[[4-[5-[4-(1-pyrrolidinyl)phenyl]-2-thienyl]phenyl]sulfonyl]amino] -, (α R)- (9CI) (CA INDEX NAME)

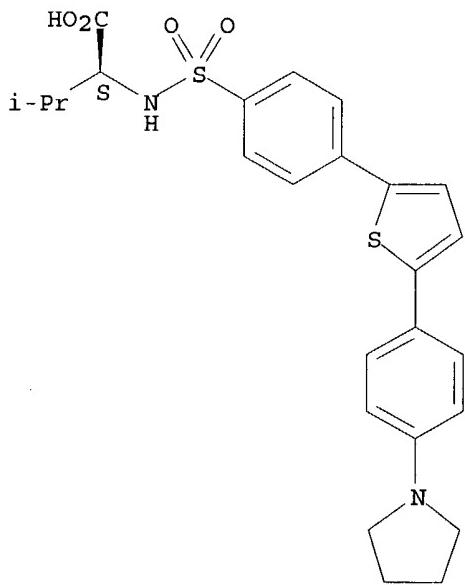
Absolute stereochemistry.



RN 607719-64-2 CAPLUS

CN L-Valine, N-[[4-[5-[4-(1-pyrrolidinyl)phenyl]-2-thienyl]phenyl]sulfonyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

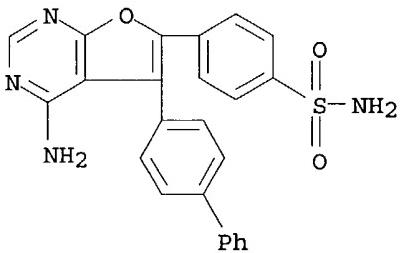


AB A medicinal composition contains a compound represented by the general formula R₆R₅R₄SO₂W [W is R₃NCH(R₂)COR₁, etc.; R₁ is hydroxy, etc.; R₂ is optionally substituted lower alkyl, etc.; R₃ is hydrogen, etc.; R₄ is optionally substituted arylene, etc.; R₅ is a single bond, CO, etc.; and R₆ is optionally substituted aryl, etc.], an optically active isomer thereof, a prodrug thereof, a pharmaceutically acceptable salt of any of these, or a solvate of any of these. Compds. of this invention in vitro

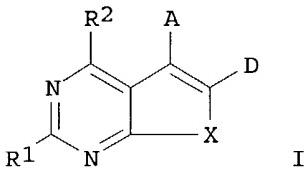
showed IC₅₀ values of 0.00045 μM to >10 μM against MMP-13.
Formulations are given.

RE.CNT 62 THERE ARE 62 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

| L3 | ANSWER 5 OF 19 CAPLUS COPYRIGHT 2004 ACS on STN | | | |
|-----------|---|------|----------|----------------------------|
| AN | 2003:221693 CAPLUS | | | |
| DN | 138:238197 | | | |
| TI | Preparation of furo- and thienopyrimidines as TIE-2 and/or VEGFR-2 kinase inhibitors useful against hyperproliferative diseases | | | |
| IN | Adams, Jerry Leroy; Bryan, Deborah Lynne; Feng, Yanhong; Matsunaga, Shinichiro; Maeda, Yutaka; Miyazaki, Yasushi; Nakano, Masato; Rocher, Jean-Philippe; Sato, Hideyuki; Semones, Marcus; Silva, Domingos J.; Tang, Jun | | | |
| PA | Glaxosmithkline K.K., Japan; Smithkline Beecham Corporation | | | |
| SO | PCT Int. Appl., 265 pp.
CODEN: PIXXD2 | | | |
| DT | Patent | | | |
| LA | English | | | |
| FAN.CNT 1 | | | | |
| | PATENT NO. | KIND | DATE | APPLICATION NO. |
| PI | WO 2003022852 | A2 | 20030320 | WO 2002-US28650 |
| | WO 2003022852 | A3 | 20031127 | |
| | W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM | | | |
| | RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG | | | |
| | | | | US 2001-318766P P 20010911 |
| EP | 1425284 | A2 | 20040609 | EP 2002-798181 20020910 |
| | R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, CY, TR, BG, CZ, EE, SK | | | |
| | | | | US 2001-318766P P 20010911 |
| | | | | WO 2002-US28650 W 20020910 |
| OS | MARPAT 138:238197 | | | |
| IT | 501695-52-9P , 4-Amino-5-(4-biphenyl)-6-(4-sulfamoylphenyl)furo[2,3-d]pyrimidine | | | |
| | RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses) | | | |
| | (drug candidate; preparation of furo- and thienopyrimidines as TIE-2 and/or VEGFR-2 kinase inhibitors useful against hyperproliferative diseases) | | | |
| RN | 501695-52-9 CAPLUS | | | |
| CN | Benzenesulfonamide, 4-(4-amino-5-[1,1'-biphenyl]-4-ylfuro[2,3-d]pyrimidin-6-yl)- (9CI) (CA INDEX NAME) | | | |



GI



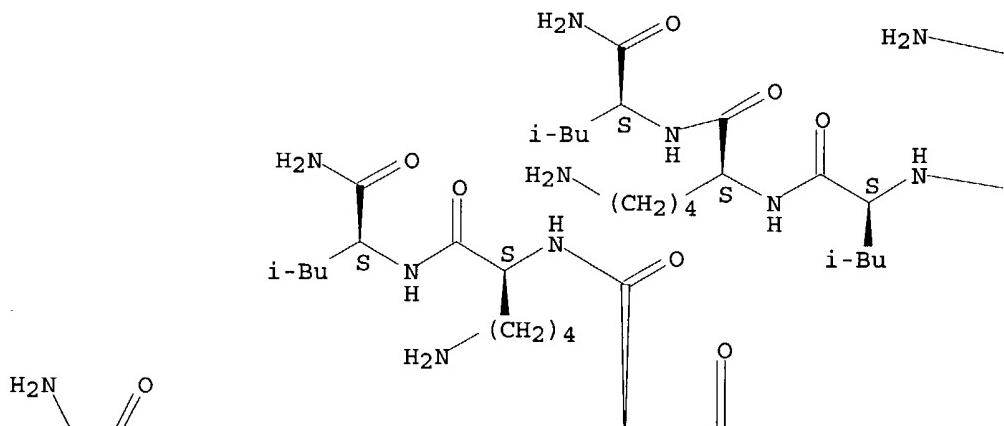
AB Furo- and thienopyrimidine derivs. (shown as I; variables defined below; e.g. 4-Amino-3-[4-methoxyphenyl]-2-[3-(methylsulfonylamino)phenyl]furo[2,3-d]pyrimidine), which are useful as TIE-2 (tyrosine kinase containing immunoglobulin and EGF homol. domains) and/or VEGFR-2 kinase inhibitors against hyperproliferative diseases are described herein. Enzyme inhibitions by .apprx.60 examples of I are included as ranges; also, 4-amino-3-[4-[(2-fluoro-5-(trifluoromethyl)phenyl]aminocarbonylaminophenyl]thieno[2,3-d]pyrimidine exhibited IC₅₀ = 0.0018 μM in the TIE-2 fluorescence polarization kinase activity assay. For I: X is O or S; A is H, halo, C₁-C₆ alkyl, aryl, heteroaryl, aryl or heteroaryl substituted with ≥1 R₃, heterocyclyl, -RR₃, -C(O)OR₄, -C(O)NR₅R₆, -C(O)R₄; D is H, halo, C₁-C₆ alkyl, aryl, heteroaryl, aryl or heteroaryl substituted with ≥1 R₃, heterocyclyl, -RR₃, -C(O)OR₄, -C(O)NR₅R₆, or -C(O)R₄. R is C₁-C₆ alkylene, C₃-C₇ cycloalkylene, C₁-C₆ alkenylene, or C₁-C₆ alkynylene; R₁ is H, C₁-C₆ alkyl, C₁-C₆ alkoxy, -SR₄, -S(O)2R₄, -NR₇R₇, -NR'N R'''R''', -N(H)RR₃, -C(O)OR₇, or -C(O)NR₇R₇. R₂ is H, -OH, -NR₇R₇ or :NH; R₃ is halo, C₁-C₆ alkyl, C₁-C₆ haloalkyl, C₁-C₆ alkoxy, C₃-C₇ cycloalkoxy, C₁-C₆ haloalkoxy, aryl, aralkyl, aryloxy, heteroaryl, heterocyclyl, -CN, -NHC(O)R₄, -N(R₈)HC(O)R₄, -NHC(S)R₄, -NR₅R₆, -RNR₅R₆, -SR₄, -S(O)2R₄, -RC(O)OR₄, -C(O)OR₄, -C(O)R₄, -C(O)NR₅R₆, -NHS(O)2R₄, -N(S(O)2R₄)S(O)2R₄, -S(O)2NR₅R₆, or -NHC(:NH)R₄. R₄ is H, C₁-C₆ alkyl, aryl, heteroaryl, heterocyclyl, -RR₃, -NR'''R''', or -NR'NR'''R'''; R₅ is H, C₁-C₆ alkyl, C₃-C₇ cycloalkyl, cyanoalkyl, -R'R'', aryl, aralkyl, heteroaryl, -NHC(O)OR''', -R'NHC(O)OR''', -R'NHC(O)NR'''R''', or -R'C(O)OR'''. R₆ is H, C₁-C₆ alkyl, C₃-C₇ cycloalkyl, cyanoalkyl, -R'R'', aryl, aralkyl, heteroaryl, -C(O)OR''', or -R'C(O)NR'''R'''; R₇ is H, C₁-C₆ alkyl, aryl, or -C(O)OR'''; R₈ is C₁-C₃ alkyl; R' is C₁-C₃ alkylene; R''' is heteroalkyl or NRR'''R'''; R'' is H, C₁-C₆ alkyl, aryl, aralkyl, heteroaryl, or C₃-C₇ cycloalkyl; R'''' is H, C₁-C₆ alkyl, aryl, heteroaryl, or C₃-C₇ cycloalkyl. Although the methods of preparation are not claimed, several example preps. of I are included and characterization data is given for .apprx.480 examples of I.

L3 ANSWER 6 OF 19 CAPLUS COPYRIGHT 2004 ACS on STN
 AN 2003:69769 CAPLUS
 DN 138:364359

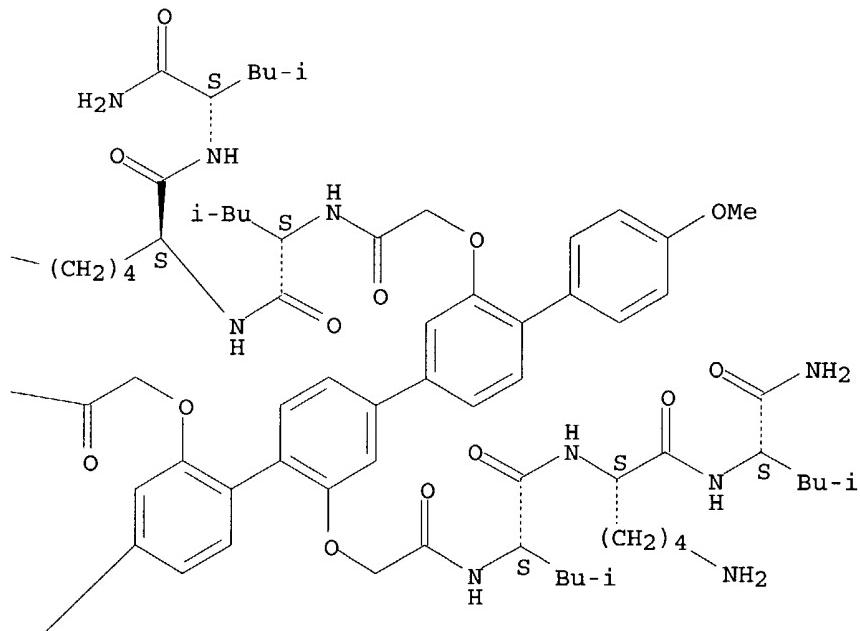
TI Voltage-dependent formation of anion channels by synthetic rigid-rod push
 - pull β -barrels
 AU Sakai, Naomi; Houdebert, David; Matile, Stefan
 CS Department of Organic Chemistry, University of Geneva, Geneva, 1211/4,
 Switz.
 SO Chemistry--A European Journal (2003), 9(1), 223-232
 CODEN: CEUJED; ISSN: 0947-6539
 PB Wiley-VCH Verlag GmbH & Co. KGaA
 DT Journal
 LA English
 IT 406217-64-9
 RL: BSU (Biological study, unclassified); BIOL (Biological study)
 (voltage-dependent formation of anion channels by synthetic rigid-rod
 push-pull β -barrels)
 RN 406217-64-9 CAPLUS
 CN L-Leucinamide, 1,1',1'',1''',1'''',1''''-[[4-methoxy-4'']-
 (methylsulfonyl)[1,1':4',1'':4'',1'':4''',1'':4''',1'':4''',1'':4''',1'':4''',
 ''':4''',1'':4''-octiphenyl]-2',2'',2'',2'',3'',3'',3'',3''-
 hexayl]hexakis[oxy(1-oxo-2,1-ethanediyl)]hexakis[L-leucyl-L-lysyl- (9CI)
 (CA INDEX NAME)

Absolute stereochemistry.

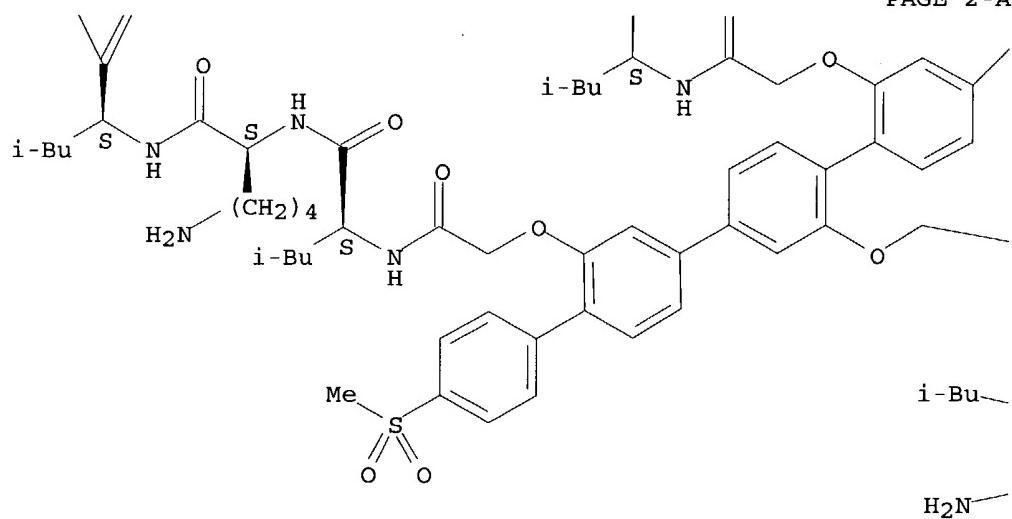
PAGE 1-A

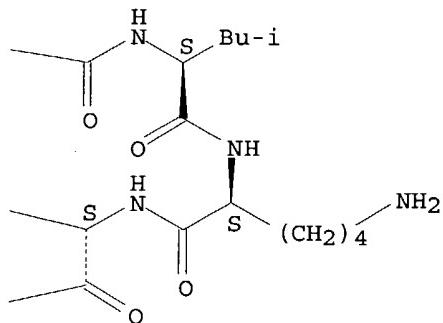


PAGE 1-B



PAGE 2-A





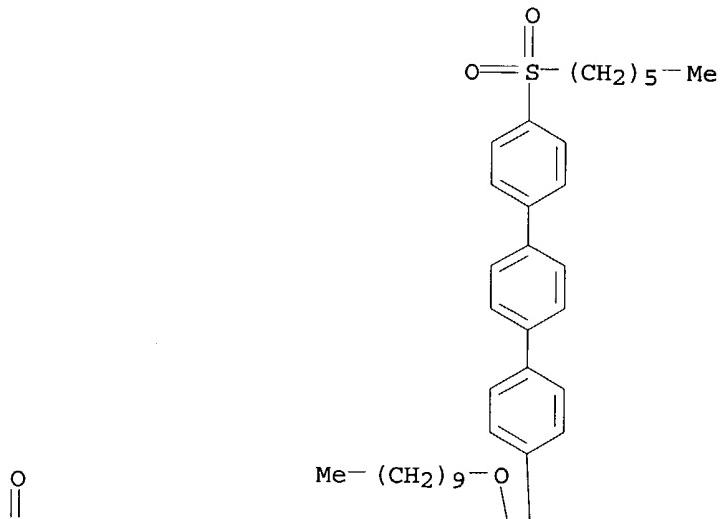
AB Ion channels formed by p-octiphenyls equipped with amphiphilic, cationic tripeptide strands and either with (5) or without (6) axial dipole moment are described (preliminary communication: N. Sakai, S. Matile, J. Am. Chemical Society 2002, 124, 1184-1185). Fluorescence kinetics with variably polarized neutral or anionic vesicles, together with planar bilayer conductance measurements, reveal voltage dependence with weakly lyotropic anion selectivity, and deactivation by competing surface potentials of the ion channels formed by asym. 5. In planar bilayers, 5 forms short-lived, poorly organized channels-similar to those produced by α -helical natural antibiotics-capable of transforming into stable, ohmic p-octiphenyl " β -barrel" ion channels similar to those of the >99% homologous but sym. 6. Fluorescence depth quenching and CD studies confirm the effect of membrane potentials in promotion of the partitioning of 5 (but not 6) into the bilayers, identifying partitioning as the voltage-dependent step.

RE.CNT 60 THERE ARE 60 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L3 ANSWER 7 OF 19 CAPLUS COPYRIGHT 2004 ACS on STN
 AN 2003:22325 CAPLUS
 DN 139:6667
 TI Synthesis and fluorescence enhancement of oligophenylene-substituted calix[4]arene assemblies
 AU Wong, Man Shing; Zhang, Xiao Ling; Chen, Dong Zhong; Cheung, Wai Ho
 CS Department of Chemistry, Hong Kong Baptist University, Hong Kong, Peop. Rep. China
 SO Chemical Communications (Cambridge, United Kingdom) (2003), (1), 138-139
 CODEN: CHCOFS; ISSN: 1359-7345
 PB Royal Society of Chemistry
 DT Journal
 LA English
 OS CASREACT 139:6667
 IT 536708-84-6P
 RL: PRP (Properties); SPN (Synthetic preparation); PREP (Preparation)
 (preparation of oligophenylene-substituted calixarene assemblies via cross-coupling reaction of oligoboronic acid and tetrahalocalixarenes and their fluorescence enhancement)
 RN 536708-84-6 CAPLUS

CN Pentacyclo[19.3.1.13,7.19,13.115,19]octacosa-1(25),3,5,7(28),9,11,13(27),1
5,17,19(26),21,23-dodecaene, 25,26,27,28-tetrakis(decyloxy)-5,11,17,23-
tetrakis[4''-(hexylsulfonyl)[1,1':4',1'''-terphenyl]-4-yl]- (9CI) (CA
INDEX NAME)

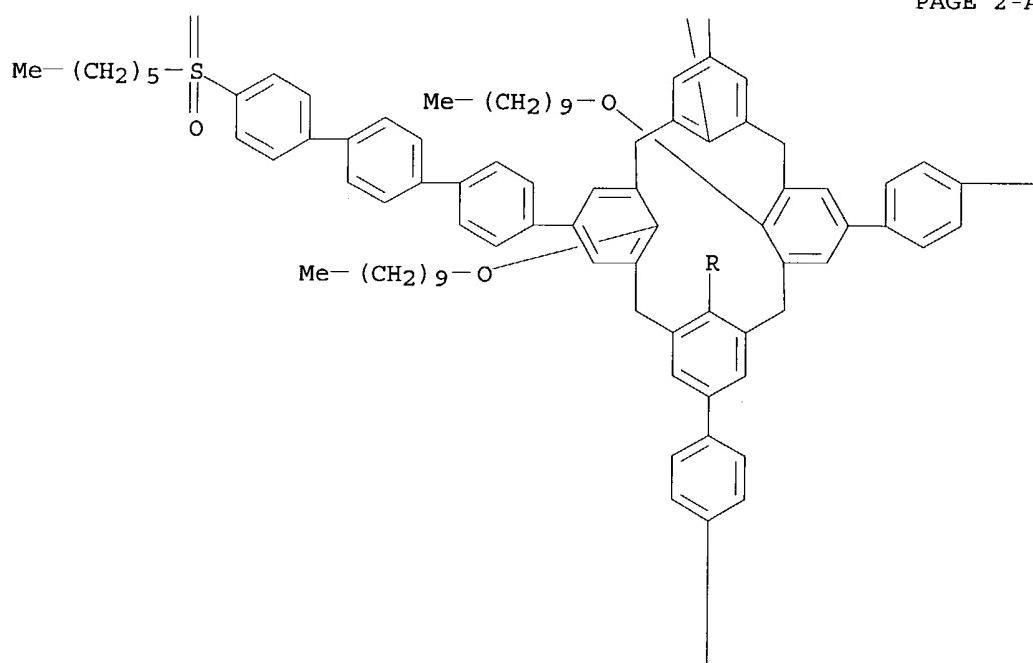
PAGE 1-A



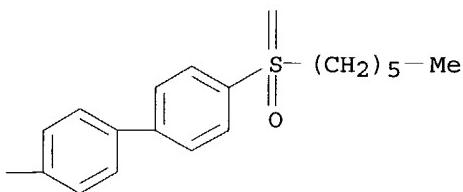
PAGE 1-B

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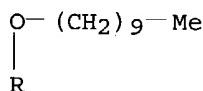
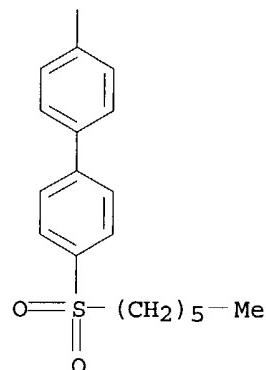
PAGE 2-A



PAGE 2-B



PAGE 3-A



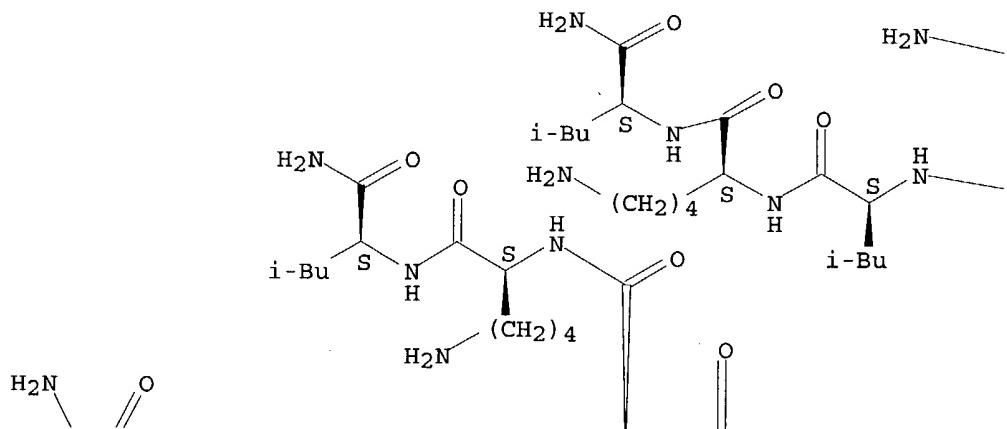
AB Tetra-oligophenylene substituted calix[4]arene assemblies containing up to three phenylene units have been synthesized by a convergent approach using Suzuki cross-coupling reaction. Their optical properties were investigated and compared with the corresponding monomer.

RE.CNT 13 THERE ARE 13 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

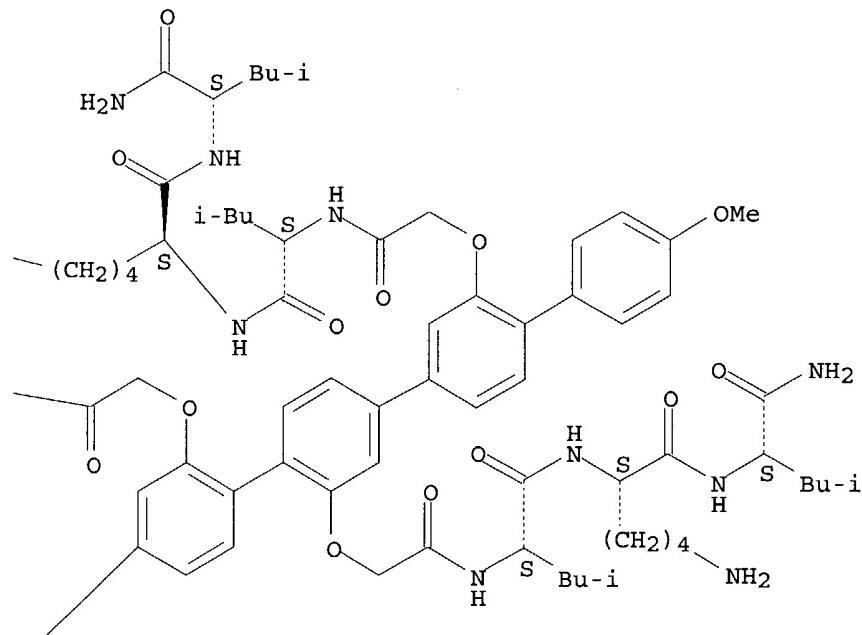
L3 ANSWER 8 OF 19 CAPLUS COPYRIGHT 2004 ACS on STN
AN 2002:805629 CAPLUS
DN 138:200393
TI On the importance of intermediate internal charge repulsion for the synthesis of multifunctional pores
AU Baumeister, Bodo; Som, Abhigyan; Das, Gopal; Sakai, Naomi; Vilbois, Francis; Gerard, David; Shahi, Shatrughan P.; Matile, Stefan
CS Department of Organic Chemistry, University of Geneva, Geneva, CH-1211/4, Switz.
SO Helvetica Chimica Acta (2002), 85(9), 2740-2753
CODEN: HCACAV; ISSN: 0018-019X
PB Verlag Helvetica Chimica Acta
DT Journal
LA English
OS CASREACT 138:200393
IT 406217-64-9
RL: BSU (Biological study, unclassified); BIOL (Biological study)
(importance of intermediate internal charge repulsion for synthesis of

Absolute stereochemistry.

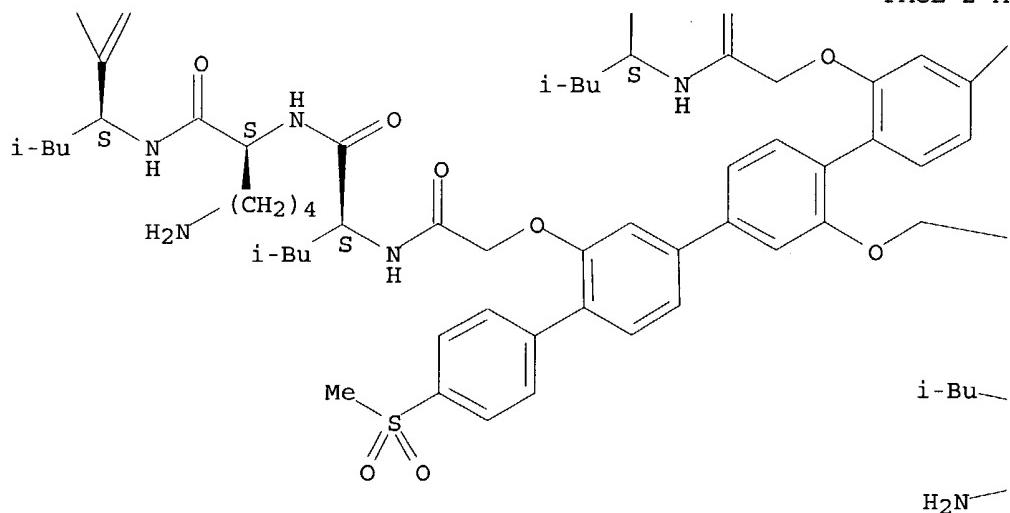
PAGE 1-A

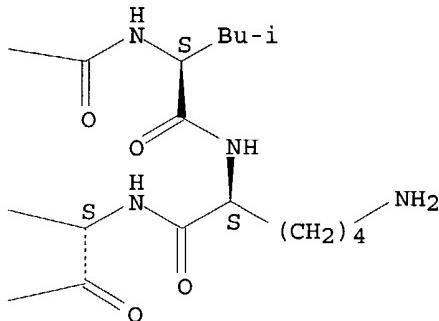


PAGE 1-B



PAGE 2-A





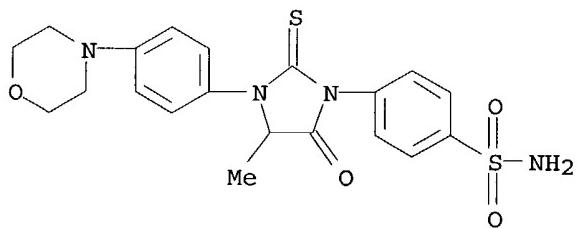
AB Intermediate internal charge repulsion (ICR) is required to create synthetic pores with large, stable, transmembrane, and variably functionalized space. This conclusion is drawn from maximal transport and, in one case, catalytic activity of p-octiphenyl β -barrel pores with internal lysine, aspartate, and histidine residues around pH 7, 6, and 4.5, resp. PKa Simulations corroborate the exptl. correlation of intermediate ICR with activity and suggest that insufficient ICR causes pore "implosion" and excess ICR pore "explosion". Esterolysis expts. support the view that the formation of stable space within multifunctional p-octiphenyl β -barrels requires more ICR in bilayer membranes than in H₂O. Multivalency effects are thought to account for p-octiphenyl β -barrel expansion with increasing number of β -sheets, and proximity effects for unchanged pH profiles with increasing β -sheet length. Q-TOF-nano-ESI-MS barrel-denaturation expts. indicate that contributions from internal counterion effects are not negligible. The overall characteristics of p-octiphenyl β -barrel pores with internal lysine, aspartate, and histidine residues, unlike de novo α -barrels" and similarly to certain biol. channels, underscore the usefulness of rigid-rod mols. to preorganize complex multifunctional supramol. architecture.

RE.CNT 102 THERE ARE 102 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

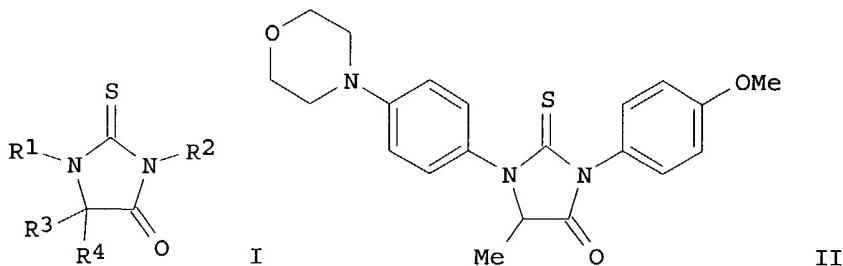
L3 ANSWER 9 OF 19 CAPLUS COPYRIGHT 2004 ACS on STN
 AN 2002:793608 CAPLUS
 DN 137:310917
 TI Aromatic-substituted thiohydantoins, their preparation, and their use for treating diabetes, dyslipidemia, and obesity
 IN Boubia, Benaiessa; Chaput, Evelyn; Ou, Khan; Ratel, Philippe
 PA Laboratoires Fournier SA, Fr.
 SO PCT Int. Appl., 111 pp.
 CODEN: PIXXD2
 DT Patent
 LA French
 FAN.CNT 1

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|------------------|-------|----------|-----------------|----------|
| ----- | ----- | ----- | ----- | ----- |
| PI WO 2002081453 | A1 | 20021017 | WO 2002-FR1167 | 20020404 |

| | | | | |
|---|----|--|----------------|----------|
| WO 2002081453 | C1 | 20021114 | | |
| W: AE, AG, AL, AM, AT, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH,
CN, CO, CR, CU, CZ, CZ, DE, DE, DK, DK, DM, DZ, EC, EE, EE, ES,
FI, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG,
KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW,
MX, MZ, NO | | | | |
| RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AT, BE, CH,
CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR,
BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG | | FR 2001-4552 | A 20010404 | |
| FR 2823209 | A1 | 20021011 | FR 2001-4552 | 20010404 |
| FR 2823209 | B1 | 20031212 | | |
| EP 1373219 | A1 | 20040102 | EP 2002-730333 | 20020404 |
| R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,
IE, SI, LT, LV, FI, RO, MK, CY, AL, TR | | FR 2001-4552 | A 20010404 | |
| | | WO 2002-FR1167 | W 20020404 | |
| EE 200300485 | A | 20040216 | EE 2003-485 | 20020404 |
| | | FR 2001-4552 | A 20010404 | |
| | | WO 2002-FR1167 | W 20020404 | |
| JP 2004525175 | T2 | 20040819 | JP 2002-579441 | 20020404 |
| | | FR 2001-4552 | A 20010404 | |
| | | WO 2002-FR1167 | W 20020404 | |
| US 2004116417 | A1 | 20040617 | US 2003-473032 | 20030926 |
| | | FR 2001-4552 | A 20010404 | |
| | | WO 2002-FR1167 | W 20020404 | |
| NO 2003004430 | A | 20031006 | NO 2003-4430 | 20031003 |
| | | FR 2001-4552 | A 20010404 | |
| | | WO 2002-FR1167 | W 20020404 | |
| OS MARPAT 137:310917 | | | | |
| IT 471937-21-0P, 1-(4-(Morpholin-4-yl)phenyl)-3-(4-
(aminosulfonyl)phenyl)-5-methyl-2-thioxo-4-imidazolidinone | | | | |
| RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU
(Therapeutic use); BIOL (Biological study); PREP (Preparation); USES
(Uses) | | | | |
| | | (drug candidate; preparation of aromatic-substituted thiohydantoins for
treatment of diabetes, dyslipidemia, and obesity) | | |
| RN 471937-21-0 CAPLUS | | | | |
| CN Benzenesulfonamide, 4-[4-methyl-3-[4-(4-morpholinyl)phenyl]-5-oxo-2-thioxo-
1-imidazolidinyl]- (9CI) (CA INDEX NAME) | | | | |



GI



AB The invention concerns compds. derived from 2-thiohydantoin, selected among compds. I [R1 = (un)substituted aromatic nucleus [substituents = halo, alkoxy, alkyl, alkylthio, NO₂, CF₃, OCF₃, OCH₂O, or (un)substituted (homo)(thio)morpholine, (homo)piperidine, (homo)piperazine, etc.]; R2 = H, alkyl or cycloalkyl [optionally interrupted by O atoms(s)], haloalkyl, alkenyl, alkynyl, hydroxyalkyl, aminoalkyl, cyanoalkyl, (un)substituted aromatic nucleus; R3 = H, alkyl; R4 = H, alkyl, OH; or R3R4 = CH₂; provided that at least one of R1 and R2 is an aromatic nucleus bearing at least one (un)substituted (homo)(thio)morpholine, (homo)piperidine, (homo)piperazine, etc.] and their addition salts with acids, in particular their pharmaceutically acceptable salts. The invention also concerns methods for preparing I, pharmaceutical compns. containing them, and their use.

as

pharmacol. active substances, in particular for treating diabetes, diseases mediated by hyperglycemia, hypertriglyceridemia, dyslipidemia, or obesity. A total of 380 invention compds. and approx. 80 intermediates were prepared and characterized. When tested orally in mice at doses below 200 mg/kg, I reduced glucose levels by up to -73%, and reduced serum triglycerides by up to -56%, with favorable changes in lipid parameters (no specific data). For instance, 4-(4-morpholinyl)aniline reacted with Et 2-bromopropionate and NaOAc in ETOH to give 69% N-[4-(4-morpholinyl)phenyl]-DL-alanine Et ester. Cyclocondensation of this amino ester with 4-(isothiocyanato)anisole in refluxing toluene in the presence of AcOH gave 82.5% title compound II.

RE.CNT 1 THERE ARE 1 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L3 ANSWER 10 OF 19 CAPLUS COPYRIGHT 2004 ACS on STN

AN 2002:73773 CAPLUS

DN 136:275111

TI Recognition of Polarized Lipid Bilayers by p-Oligophenyl Ion Channels:
From Push-Pull Rods to Push-Pull Barrels

AU Sakai, Naomi; Matile, Stefan

CS Department of Organic Chemistry, University of Geneva, Geneva, CH-1211, Switz.

SO Journal of the American Chemical Society (2002), 124 (7), 1184-1185

CODEN: JACSAT; ISSN: 0002-7863

PB American Chemical Society

DT Journal

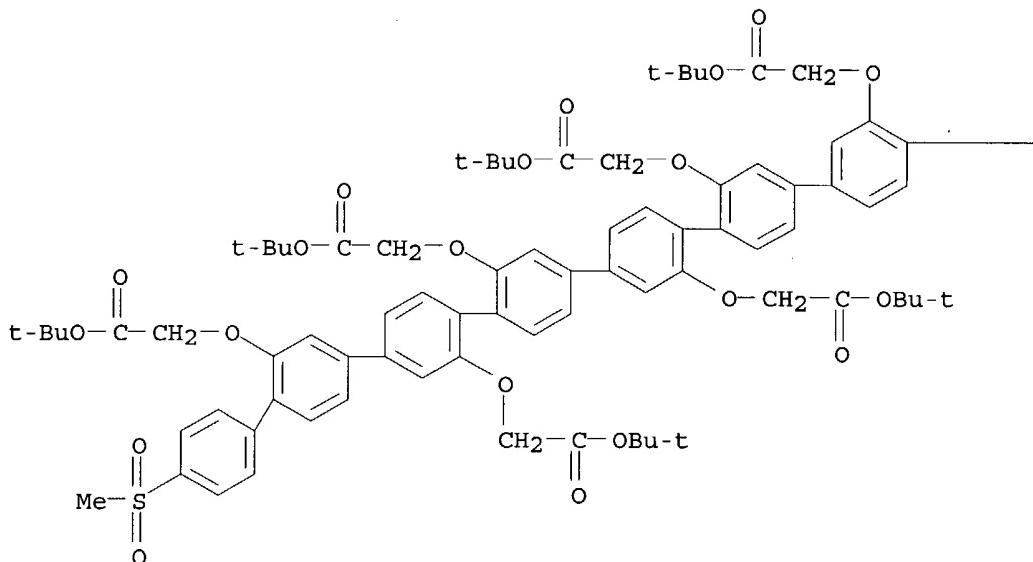
LA English

IT 406217-67-2P

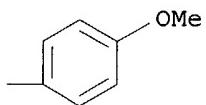
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)

(intermediate; preparation of p-oligophenyl push-pull β -barrel synthetic ion channels which recognize phosphatidylcholine bilayer membranes)

PAGE 1-A



PAGE 1-B



IT 406217-64-9P

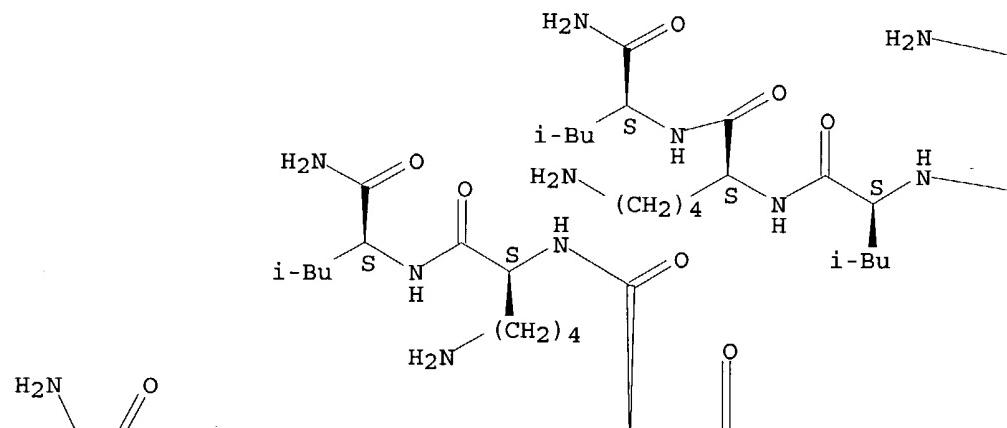
RL: BSU (Biological study, unclassified); BUU (Biological use, unclassified); PRP (Properties); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation); USES (Uses)

(preparation of p-oligophenyl push-pull β -barrel synthetic ion channels which recognize phosphatidylcholine bilayer membranes)

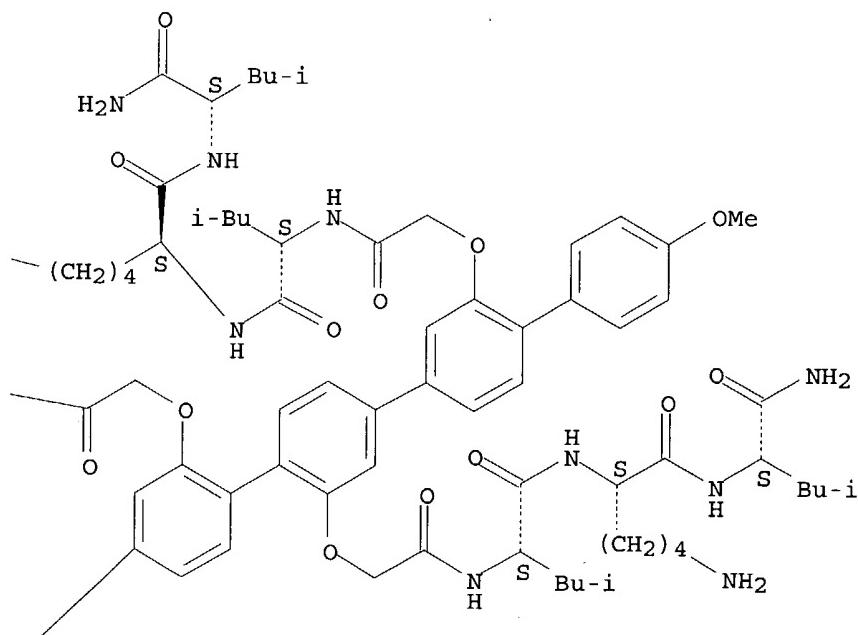
RN 406217-64-9 CAPLUS

Absolute stereochemistry.

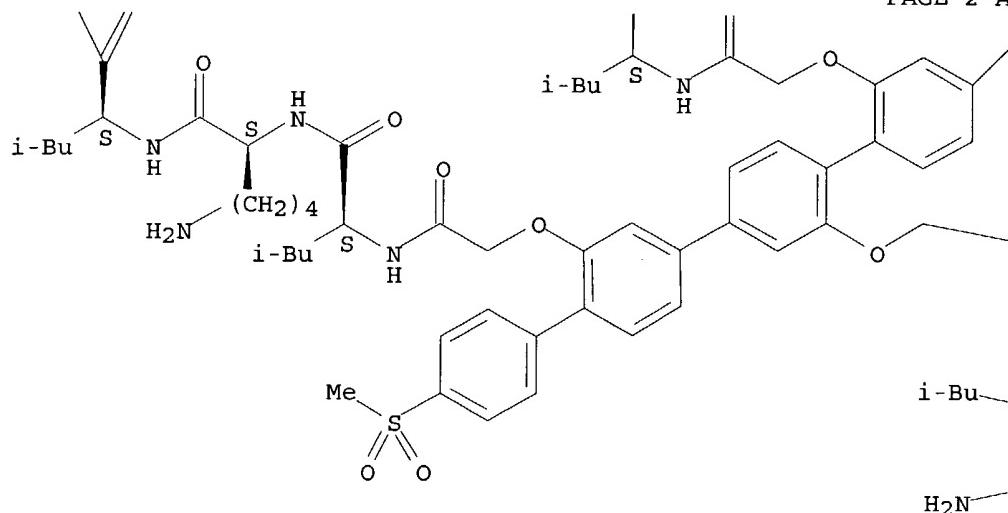
PAGE 1-A



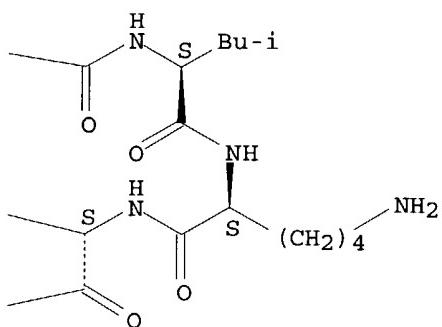
PAGE 1-B



PAGE 2-A



PAGE 2-B

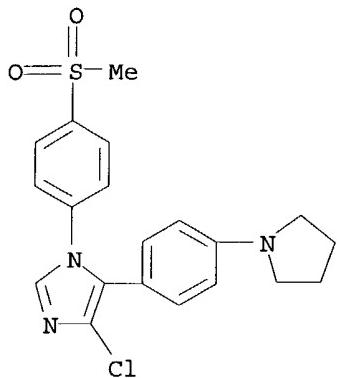


AB Design, synthesis, and evaluation of 14-methoxy-84-methylsulfonyl-22,33,42,53,62,73-hexa(Gla-Leu-Lys-Leu-NH₂)-p-octiphenyl (1) and 14,84-bismethoxy-22,33,42,53,62,73-hexa(Gla-Leu-Lys-Leu-NH₂)-p-octiphenyl (2) are described (Gla = -OCH₂CO-). Nanomolar concns. of push-pull rod 1 are found to suffice to selectively form ion channels in polarized spherical bilayer membranes composed of egg yolk phosphatidylcholine. Exponential dependence of the ion-channel activity on membrane polarization reveals a gating charge of 0.85/channel. Independence of the activity of push-push rod 2 on membrane potential demonstrates that cell membrane recognition originates from the axial dipole in push-pull rod 1. Nonlinear concentration dependence of activity at -180 mV indicates parallel self-assembly of push-pull rod 1 into a tetrameric barrel-stave supramol.

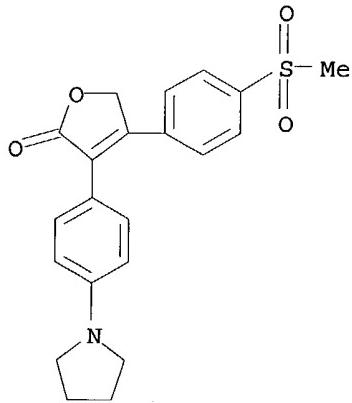
RE.CNT 18 THERE ARE 18 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L3 ANSWER 11 OF 19 CAPLUS COPYRIGHT 2004 ACS on STN
 AN 2001:816659 CAPLUS
 DN 135:357924
 TI Novel heterocyclic compounds, namely imidazole sulfones and analogs, with anti-inflammatory activity, their preparation, and their therapeutic use as cyclooxygenase 2 inhibitors
 IN Almansa Rosales, Carmen; Gonzalez Gonzalez, Concepcion; Torres Barreda, M. Carmen
 PA J. Uriach & Cia S.A., Spain
 SO PCT Int. Appl., 72 pp.
 CODEN: PIXXD2
 DT Patent
 LA Spanish
 FAN.CNT 1

| | PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|----|---|------|----------|-----------------|------------|
| PI | WO 2001083475 | A1 | 20011108 | WO 2001-ES152 | 20010423 |
| | W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM | | | | |
| | RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG | | | ES 2000-1138 | A 20000425 |
| ES | 2166710 | A1 | 20020416 | ES 2000-1138 | 20000425 |
| BR | 2001010328 | A | 20030107 | BR 2001-10328 | 20010423 |
| | | | | ES 2000-1138 | A 20000425 |
| | | | | WO 2001-ES152 | W 20010423 |
| EP | 1281709 | A1 | 20030205 | EP 2001-921386 | 20010423 |
| | R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR | | | ES 2000-1138 | A 20000425 |
| | | | | WO 2001-ES152 | W 20010423 |
| JP | 2003531903 | T2 | 20031028 | JP 2001-580903 | 20010423 |
| | | | | ES 2000-1138 | A 20000425 |
| | | | | WO 2001-ES152 | W 20010423 |
| NO | 2002005101 | A | 20021220 | NO 2002-5101 | 20021024 |
| | | | | ES 2000-1138 | A 20000425 |
| | | | | WO 2001-ES152 | W 20010423 |
| US | 2003114456 | A1 | 20030619 | US 2002-258471 | 20021025 |
| | | | | ES 2000-1138 | A 20000425 |
| | | | | WO 2001-ES152 | W 20010423 |
| OS | MARPAT 135:357924 | | | | |
| IT | 372107-26-1P, 4-Chloro-1-(4-methylsulfonylphenyl)-5-[4-(1-pyrrolidinyl)phenyl]imidazole 372107-51-2P, 4-(4-Methylsulfonylphenyl)-3-[4-(1-pyrrolidinyl)phenyl]-5H-furan-2-one | | | | |
| | RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); RCT (Reactant); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); RACT (Reactant or reagent); USES (Uses) | | | | |
| | (drug candidate; preparation of imidazole sulfones and analogs as cyclooxygenase 2 inhibitors and antiinflammatories) | | | | |
| RN | 372107-26-1 CAPLUS | | | | |
| CN | 1H-Imidazole, 4-chloro-1-[4-(methylsulfonyl)phenyl]-5-[4-(1-pyrrolidinyl)phenyl]- (9CI) (CA INDEX NAME) | | | | |



RN 372107-51-2 CAPLUS
 CN 2 (5H)-Furanone, 4-[4-(methylsulfonyl)phenyl]-3-[4-(1-pyrrolidinyl)phenyl]-
 (9CI) (CA INDEX NAME)

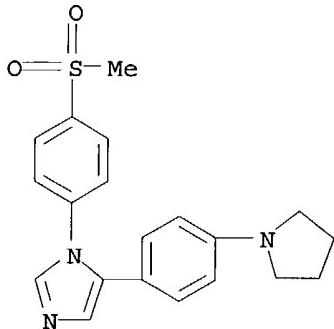


IT 372107-27-2P, 1-(4-Methylsulfonylphenyl)-5-[4-(1-pyrrolidinyl)phenyl]imidazole 372107-28-3P, 4-Chloro-5-[4-(3-hydroxypyrrolidin-1-yl)phenyl]-1-(4-methylsulfonylphenyl)imidazole 372107-29-4P, 4-Chloro-5-[4-(2-methylpyrrolidin-1-yl)phenyl]-1-(4-methylsulfonylphenyl)imidazole 372107-31-8P, 4-[4-Chloro-5-[4-(1-pyrrolidinyl)phenyl]imidazol-1-yl]benzenesulfonamide 372107-33-0P, 4-Chloro-5-[3-chloro-4-(1-pyrrolidinyl)phenyl]-1-(4-methylsulfonylphenyl)imidazole 372107-35-2P, 4-Chloro-1-(4-methylsulfonylphenyl)-5-[4-(2,5-dioxopyrrolidin-1-yl)phenyl]imidazole 372107-37-4P, 4-Chloro-1-(4-methylsulfonylphenyl)-5-[4-(2-oxo-3-pyrrolin-1-yl)phenyl]imidazole 372107-39-6P, 4-Chloro-1-(4-methylsulfonylphenyl)-5-[4-(2-oxooxazolidin-3-yl)phenyl]imidazole 372107-43-2P, 4-Chloro-1-(4-methylsulfonylphenyl)-5-[4-(2-oxopyrrolidin-1-yl)phenyl]imidazole 372107-48-7P, 3-[4-(2,5-Dioxopyrrolidin-1-yl)phenyl]-4-(4-methylsulfonylphenyl)-5H-furan-2-one 372107-49-8P, 4-(4-Methylsulfonylphenyl)-3-[4-(2-oxo-3-pyrrolin-1-yl)phenyl]-5H-furan-2-one 372107-52-3P, 3-[3-Chloro-4-(1-pyrrolidinyl)phenyl]-4-(4-methylsulfonylphenyl)-5H-furan-2-one 372107-54-5P, 4-[5-[4-(2-Oxo-3-pyrrolin-1-yl)phenyl]-3-trifluoromethyl-1H-pyrazol-1-

yl]benzenesulfonamide **372107-55-6P**, 4-[5-[4-(1-Pyrrolidinyl)phenyl]-3-trifluoromethyl-1H-pyrazol-1-yl]benzenesulfonamide
 RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
 (drug candidate; preparation of imidazole sulfones and analogs as cyclooxygenase 2 inhibitors and antiinflammatories)

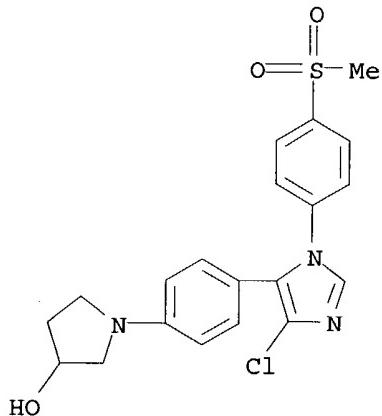
RN 372107-27-2 CAPLUS

CN 1H-Imidazole, 1-[4-(methylsulfonyl)phenyl]-5-[4-(1-pyrrolidinyl)phenyl]- (9CI) (CA INDEX NAME)



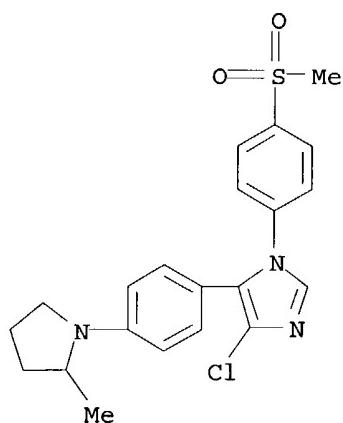
RN 372107-28-3 CAPLUS

CN 3-Pyrrolidinol, 1-[4-[4-chloro-1-[4-(methylsulfonyl)phenyl]-1H-imidazol-5-yl]phenyl]- (9CI) (CA INDEX NAME)



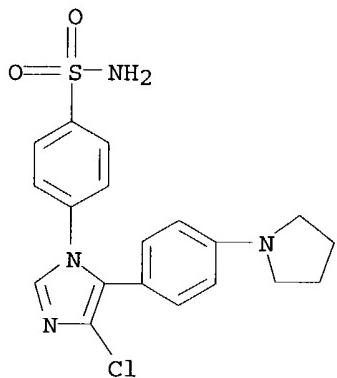
RN 372107-29-4 CAPLUS

CN 1H-Imidazole, 4-chloro-5-[4-(2-methyl-1-pyrrolidinyl)phenyl]-1-[4-(methylsulfonyl)phenyl]- (9CI) (CA INDEX NAME)



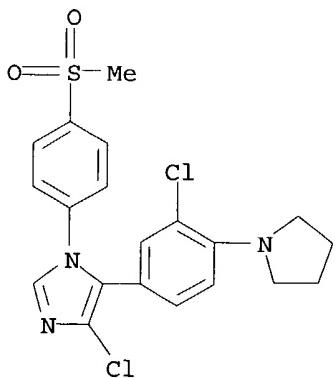
RN 372107-31-8 CAPLUS

CN Benzenesulfonamide, 4-[4-chloro-5-[4-(1-pyrrolidinyl)phenyl]-1H-imidazol-1-yl] - (9CI) (CA INDEX NAME)

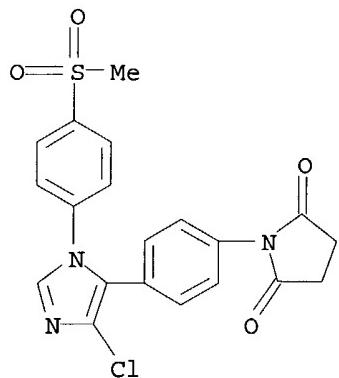


RN 372107-33-0 CAPLUS

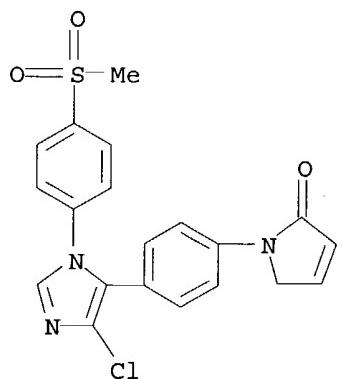
CN 1H-Imidazole, 4-chloro-5-[3-chloro-4-(1-pyrrolidinyl)phenyl]-1-[4-(methylsulfonyl)phenyl]- (9CI) (CA INDEX NAME)



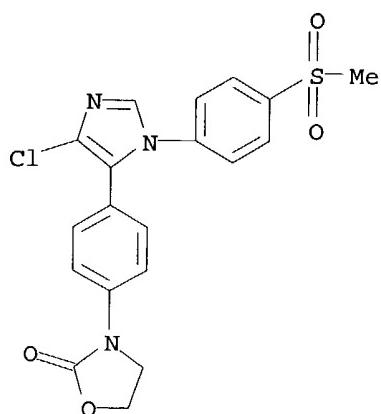
RN 372107-35-2 CAPLUS
CN 2,5-Pyrrolidinedione, 1-[4-[4-chloro-1-[4-(methylsulfonyl)phenyl]-1H-imidazol-5-yl]phenyl]- (9CI) (CA INDEX NAME)



RN 372107-37-4 CAPLUS
CN 2H-Pyrrol-2-one, 1-[4-[4-chloro-1-[4-(methylsulfonyl)phenyl]-1H-imidazol-5-yl]phenyl]-1,5-dihydro- (9CI) (CA INDEX NAME)

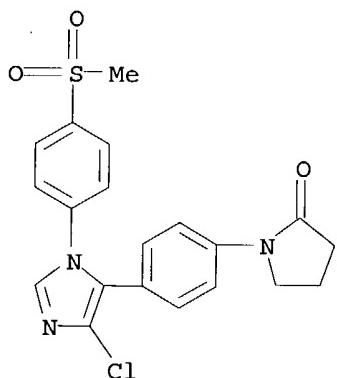


RN 372107-39-6 CAPLUS
CN 2-Oxazolidinone, 3-[4-[4-chloro-1-[4-(methylsulfonyl)phenyl]-1H-imidazol-5-yl]phenyl]- (9CI) (CA INDEX NAME)



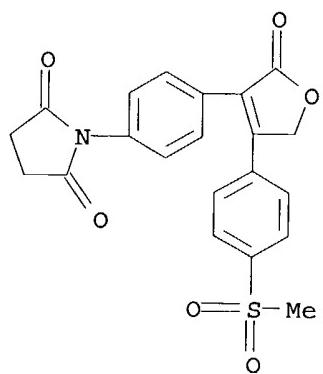
RN 372107-43-2 CAPLUS

CN 2-Pyrrolidinone, 1-[4-[4-chloro-1-[4-(methylsulfonyl)phenyl]-1H-imidazol-5-yl]phenyl]- (9CI) (CA INDEX NAME)



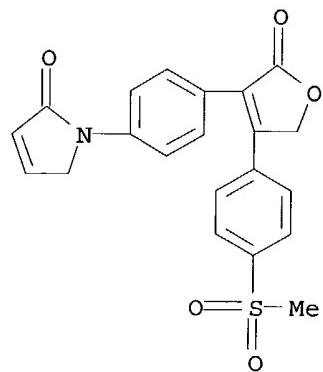
RN 372107-48-7 CAPLUS

CN 2,5-Pyrrolidinedione, 1-[4-[2,5-dihydro-4-[4-(methylsulfonyl)phenyl]-2-oxo-3-furanyl]phenyl]- (9CI) (CA INDEX NAME)



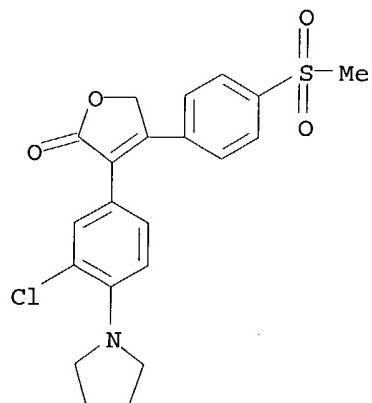
RN 372107-49-8 CAPLUS

CN 2H-Pyrrol-2-one, 1-[4-[2,5-dihydro-4-[4-(methylsulfonyl)phenyl]-2-oxo-3-furanyl]phenyl]-1,5-dihydro- (9CI) (CA INDEX NAME)



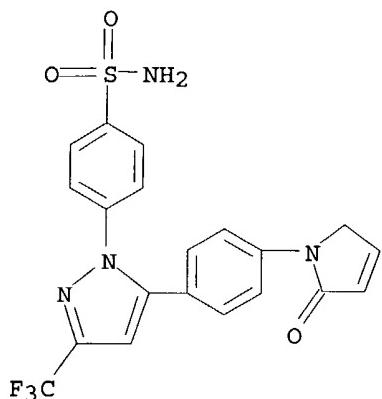
RN 372107-52-3 CAPLUS

CN 2(5H)-Furanone, 3-[3-chloro-4-(1-pyrrolidinyl)phenyl]-4-[4-(methylsulfonyl)phenyl]- (9CI) (CA INDEX NAME)

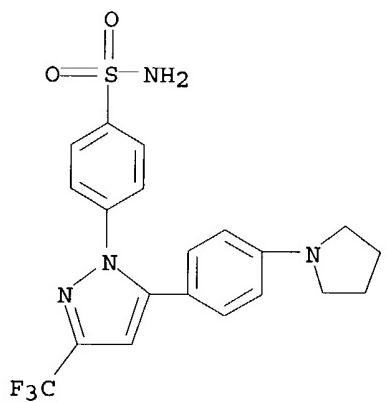


RN 372107-54-5 CAPLUS

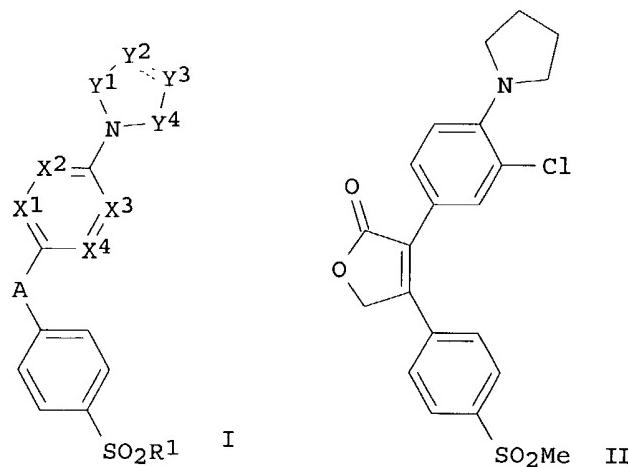
CN Benzenesulfonamide, 4-[5-[4-(2,5-dihydro-2-oxo-1H-pyrrol-1-yl)phenyl]-3-(trifluoromethyl)-1H-pyrazol-1-yl]- (9CI) (CA INDEX NAME)



RN 372107-55-6 CAPLUS
CN Benzenesulfonamide, 4-[5-[4-(1-pyrrolidinyl)phenyl]-3-(trifluoromethyl)-1H-pyrazol-1-yl]-(9CI) (CA INDEX NAME)



GI



AB The invention relates to novel heterocyclic compds. of formula I, and to their salts, solvates, and prodrugs [wherein: A = 5-membered unsatd. or partially unsatd. ring with 1-3 optional heteroatoms (N/O/S), optional substituent(s) R₂, and adjacent aryl groups; R₁ = C₁₋₈ (halo)alkyl, NR₃R₄; R₂ = C₁₋₄ (halo)alkyl, halo, oxo, cyano, NO₂, CHO, COCH₃, CO₂R₃; R₃ = H, C₁₋₈ alkyl, aryl, arylalkyl; R₄ = H, C₁₋₈ alkyl, arylalkyl, COR₅, CO₂R₅; R₅ = C₁₋₈ (halo)alkyl; all X's = CR₆; or 1-3 X's = N and the remainder = CR₆; R₆ = H, halo, C₁₋₃ alkyl or alkoxy; dashed bond = optional pi bond; Y₁, Y₄ = CR₇R₇ or CO; Y₂ and Y₃ = CR₈ when doubly bonded, or CR₈R₈ when singly bonded; Y₂ can be CO if Y₁ is not; Y₃ can be CO if Y₄ is not; Y₃ can be NR₉, O, or S if Y₄ is CO; R₇ = H, Me, Et; R₈ = H, Me, Et, OH, OMe, or halo; R₉ = H or C₁₋₄ alkyl; aryl = Ph or naphthyl optionally substituted by C₁₋₈ (halo)alkyl, halo, cyano, NO₂, OR₁₀, alkyl-OR₁₀, SR₁₀, alkyl-SR₁₀, NR₁₀R₁₁, NR₁₀COR₁₁, COR₁₀, CO₂R₁₀; R₁₀ = H, C₁₋₈ alkyl, CH₂Ph, R₁₁ = C₁₋₈ (halo)alkyl]. The compds. are selective inhibitors of cyclooxygenase 2 (COX-2), useful as anti-inflammatory agents. Nineteen examples and 8 reference examples are given. For instance, 1-(4-methylsulfonylphenyl)ethanone underwent α -bromination, cyclocondensation with 4-nitrophenylacetic acid (60%), and hydrogenation at nitro (95%) to give 3-(4-aminophenyl)-4-(4-methylsulfonylphenyl)-5H-furan-2-one. This intermediate underwent cyclization with 1,4-dibromobutane at the amino group (27%) and adjacent ring chlorination (73%) to give title compound II. In tests for inhibition of COX-1 and COX-2 activity in human cell lines, II at 0.1 μ M gave 93% inhibition of COX-2 but did not appreciably inhibit COX-1 (0%).

RE.CNT 13 THERE ARE 13 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L3 ANSWER 12 OF 19 CAPLUS COPYRIGHT 2004 ACS on STN
AN 2001:816651 CAPLUS

DN 135:358158

TI Preparation of N-[4-(oxadiazol-2-yl)phenylsulfonyl]-amino acid derivatives having therapeutic or preventive efficacies against glomerular disorders

IN Shinosaki, Toshihiro; Ninomiya, Mitsuyoshi; Watanabe, Fumihiro

PA Shionogi & Co., Ltd., Japan

SO PCT Int. Appl., 53 pp.

CODEN: PIXXD2

DT Patent

LA Japanese

FAN.CNT 1

| | PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|----|---|------|----------|-----------------|------------|
| PI | WO 2001083464 | A1 | 20011108 | WO 2001-JP3215 | 20010416 |
| | W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM | | | | |
| | RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG | | | | |
| | | | | JP 2000-120235 | A 20000421 |

OS MARPAT 135:358158

IT 372106-16-6P, (R)-2-[[[4-[3-(4-(Pyrrolidin-1-yl)phenyl)-1,2,4-oxadiazol-5-yl]phenyl]sulfonyl]amino]-2-benzylethanoic acid

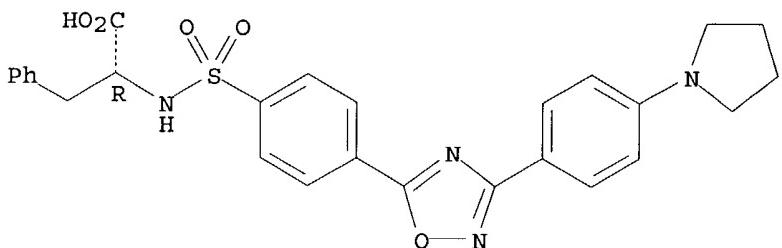
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use);

BIOL (Biological study); PREP (Preparation); USES (Uses)
 (preparation of [(oxadiazolyl)phenylsulfonyl]-amino acid derivs. as matrix
 metalloproteinase inhibitors and therapeutic or preventive agents for
 glomerular disorders)

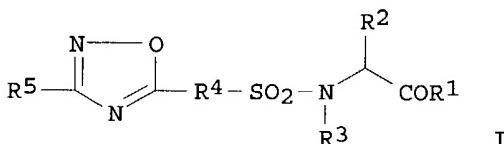
RN 372106-16-6 CAPLUS

CN D-Phenylalanine, N-[(4-[3-[4-(1-pyrrolidinyl)phenyl]-1,2,4-oxadiazol-5-
 yl]phenyl)sulfonyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



GI



- AB Pharmaceutical compns. for the treatment or prevention of glomerular disorders contain as the active ingredient compds. of the general formula [I; R1 = NH₂, OH, lower alkyloxy; R2, R3 = H, (un)substituted lower alkyl, aryl, aralkyl, heteroaryl, or heteroarylalkyl; R4 = (un)substituted arylene or heteroarylene; R5 = (un)substituted aryl, heteroaryl, or nonarom. heterocycl], prodrugs of the same, pharmaceutically acceptable salts of both, or solvates of them. These compds. I inhibit matrix metalloproteinase (MMP) and are safe and highly effective for the prevention or treatment of glomerular disorders, in particular glomerular nephritis and diabetic nephropathy. They are also useful for the treatment of osteoarthritis, aortic aneurysm, and diabetic retinopathy. Thus, N-sulfonylation of D-phenylalanine Me ester hydrochloride with 4-chlorosulfonylbenzoic acid in aqueous Na₂CO₃ at room temperature for 3 h gave N-(4-carboxyphenylsulfonyl)-L-phenylalanine Me ester which was converted into the acid chloride by treatment with oxalyl chloride in DMF at room temperature for 1 h and cyclocondensed with 4-fluorobenzamidoxime (preparation given) in pyridine and diglyme at room temperature for 1 h and then at 110° for 3 h, followed by saponification with a mixture of 1 N aqueous NaOH and DMSO and acidification with aqueous 2 N HCl to give N-[4-[3-(4-fluorophenyl)-1,2,4-oxadiazol-5-yl]phenylsulfonyl]-D-phenylalanine. N-[4-[3-(5-chlorothiophen-2-yl)-1,2,4-oxadiazol-5-yl]phenylsulfonyl]-L-valine showed IC₅₀ of 0.0051, 0.056, and 0.025 μM against MMP-2, 8, and 9, resp.
- RE.CNT 6 THERE ARE 6 CITED REFERENCES AVAILABLE FOR THIS RECORD
 ALL CITATIONS AVAILABLE IN THE RE FORMAT

L3 ANSWER 13 OF 19 CAPLUS COPYRIGHT 2004 ACS on STN

AN 2001:816650 CAPLUS
 DN 135:357931
 TI Preparation of oxadiazole derivatives as anticancer agents inhibiting MMP-2
 IN Yoshioka, Takayuki; Maekawa, Ryuji; Watanabe, Fumihiro
 PA Shionogi & Co., Ltd., Japan
 SO PCT Int. Appl., 57 pp.
 CODEN: PIXXD2
 DT Patent
 LA Japanese
 FAN.CNT 1

| | PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|----|---------------|------|----------|--|-------------|
| PI | WO 2001083463 | A1 | 20011108 | WO 2001-JP3214 | 20010416 |
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CO, CR, CU, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM,
HR, HU, ID, IL, IN, IS, JP, KE, KG, KR, KZ, LC, LK, LR, LS, LT,
LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU,
SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN,
YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY,
DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF,
BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG | |
| | | | | JP 2000-120234 | A 20000421 |
| AU | 2001046916 | A5 | 20011112 | AU 2001-46916 | 20010416 |
| | | | | JP 2000-120234 | A 20000421 |
| | | | | WO 2001-JP3214 | W 20010416 |
| EP | 1277744 | A1 | 20030122 | EP 2001-919938 | 20010416 |
| | | | | R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,
IE, SI, LT, LV, FI, RO, MK, CY, AL, TR | |
| | | | | JP 2000-120234 | A 20000421 |
| | | | | WO 2001-JP3214 | W 20010416 |
| BR | 2001010211 | A | 20030603 | BR 2001-10211 | 20010416 |
| | | | | JP 2000-120234 | A 20000421 |
| | | | | WO 2001-JP3214 | W 20010416 |
| ZA | 2002008307 | A | 20031015 | ZA 2002-8307 | 20021015 |
| | | | | JP 2000-120234 | A 20000421 |
| NO | 2002005035 | A | 20021219 | NO 2002-5035 | 20021018 |
| | | | | JP 2000-120234 | A 20000421 |
| | | | | WO 2001-JP3214 | W 20010416 |
| US | 2003203940 | A1 | 20031030 | US 2002-257917 | 20021018 |
| US | 6720343 | B2 | 20040413 | | |
| | | | | JP 2000-120234 | A 20000421 |
| | | | | WO 2001-JP3214 | W 20010416 |
| US | 2004122066 | A1 | 20040624 | US 2003-730946 | 20031210 |
| | | | | JP 2000-120234 | A 20000421 |
| | | | | WO 2001-JP3214 | W 20010416 |
| | | | | US 2002-257917 | A3 20021018 |

OS MARPAT 135:357931

IT 372106-16-6P

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
 (preparation of oxadiazole derivs. as anticancer agents inhibiting MMP-2)

RN 372106-16-6 CAPLUS

CN D-Phenylalanine, N-[4-[3-[4-(1-pyrrolidinyl)phenyl]-1,2,4-oxadiazol-5-yl]phenyl]sulfonyl] - (9CI) (CA INDEX NAME)

Absolute stereochemistry.

HR, HU, ID, IL, IN, IS, JP, KE, KG, KR, KZ, LC, LK, LR, LS, LT,
 LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU,
 SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN,
 YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM
 RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY,
 DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF,
 BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG

JP 2000-130041 A 20000428
 JP 2000-293419 A 20000927

OS MARPAT 135:344729

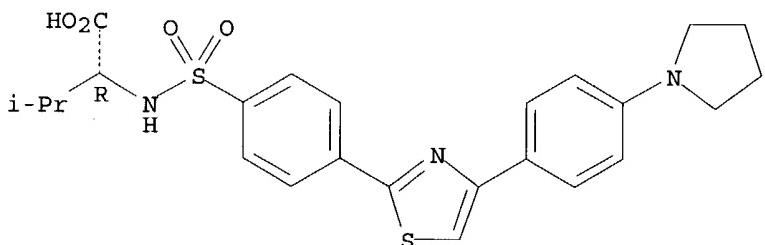
IT 370597-61-8P

RL: SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
 (preparation of N-thiazolylphenylsulfonylamino acid and N-oxazolylphenylsulfonylamino acid derivs. as macrophage metalloelastase inhibitors)

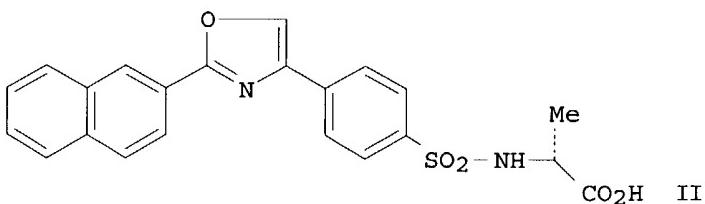
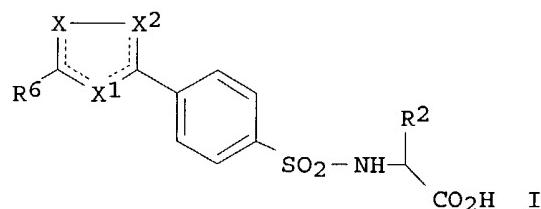
RN 370597-61-8 CAPLUS

CN D-Valine, N-[4-[4-[4-(1-pyrrolidinyl)phenyl]-2-thiazolyl]phenyl]sulfonyl]-(9CI) (CA INDEX NAME)

Absolute stereochemistry.



GI



AB Title compds. [I; X = O, N, S, CH; X1 = N, O; X2 = CH, S; dotted bond = single bond, double bond; R6 = (un)substituted aryl, benzofuranyl, benzothienyl; R2 = alkyl], optical isomers, prodrugs, and pharmaceutically

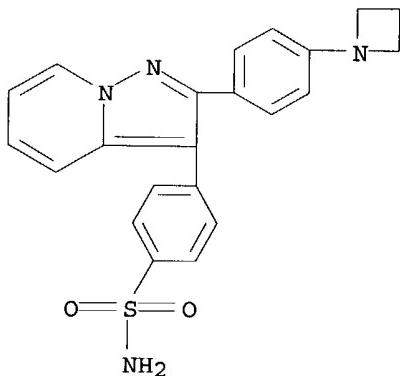
acceptable salts or solvates of title compds. are prepared as macrophage metalloelastase inhibitors. Thus, the title compound II was prepared and MMP-1, MMP-2, MMP-8, MMP-9, MMP-12, and MMP-13 inhibition tested.

RE.CNT 6 THERE ARE 6 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

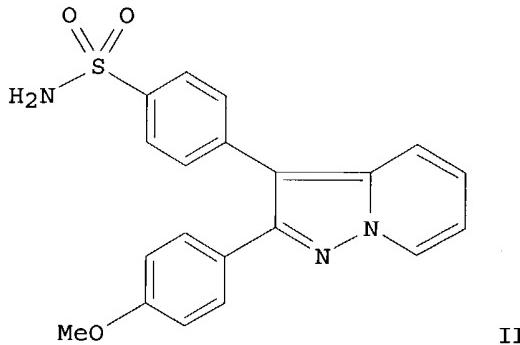
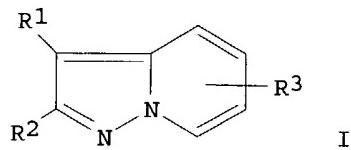
L3 ANSWER 15 OF 19 CAPLUS COPYRIGHT 2004 ACS on STN
 AN 2001:371567 CAPLUS
 DN 135:5612
 TI Preparation of new pyrazolo terpyridines as remedies for inflammation, autoimmune diseases
 IN Yamamoto, Hiroyumi; Takahashi, Fumie; Kato, Takeshi; Nakamura, Katsuya; Manabe, Koji
 PA Fujisawa Pharmaceutical Co., Ltd., Japan
 SO Jpn. Kokai Tokkyo Koho, 64 pp.
 CODEN: JKXXAF
 DT Patent
 LA Japanese
 FAN.CNT 1

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|------------------|------|----------|-----------------|----------|
| ----- | ---- | ----- | ----- | ----- |
| PI JP 2001139575 | A2 | 20010522 | JP 1999-323692 | 19991115 |
| | | | JP 1999-323692 | 19991115 |

OS MARPAT 135:5612
 IT 340322-50-1P
 RL: SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
 (preparation of new pyrazolo terpyridines as remedies for inflammation autoimmune diseases)
 RN 340322-50-1 CAPLUS
 CN Benzenesulfonamide, 4-[2-[4-(1-azetidinyl)phenyl]pyrazolo[1,5-a]pyridin-3-yl]- (9CI) (CA INDEX NAME)



GI



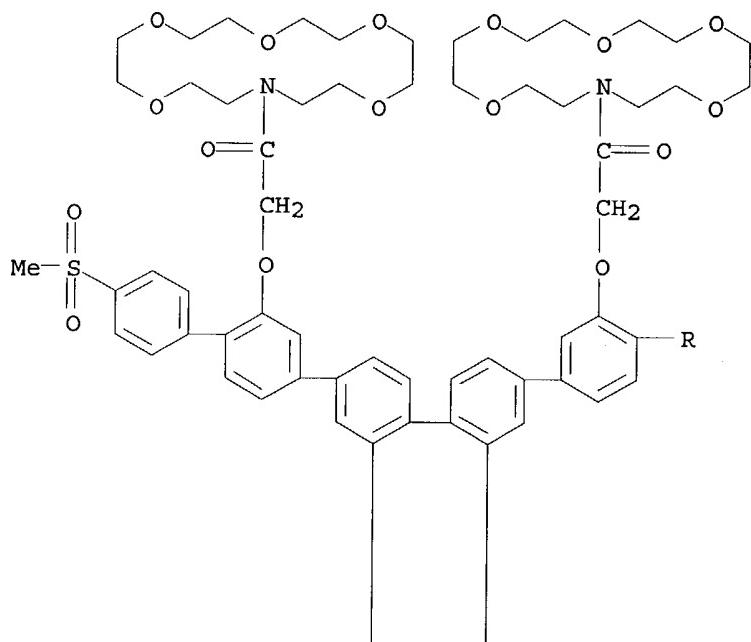
AB The pyrazolo terpyridine or that salt which is cyclooxygenase - 2 (COX-II) inhibitors, those production methods, the medicine composition, and the person
or
the animal which contain those inflammation condition, u painfully, prevention of the autoimmune disease and / or the method of treating is offered. Below-mentioned general formula (I) [in the formula, the R1 and the R2, the resp. hydrogen, the hydrogen, the low-grade alkyl group and the halogen et cetera, mean, R3 such as low-grade alkyl group and the cyclo (low grade) alkyl group resp.] So the chemical compound which is displayed or that salt.

L3 ANSWER 16 OF 19 CAPLUS COPYRIGHT 2004 ACS on STN
 AN 2001:130219 CAPLUS
 DN 134:322321
 TI Electrostatics of Cell Membrane Recognition: Structure and Activity of Neutral and Cationic Rigid Push-Pull Rods in Isoelectric, Anionic, and Polarized Lipid Bilayer Membranes
 AU Sakai, Naomi; Gerard, David; Matile, Stefan
 CS Department of Organic Chemistry, University of Geneva, Geneva, CH-1211, Switz.
 SO Journal of the American Chemical Society (2001), 123(11), 2517-2524
 CODEN: JACSAT; ISSN: 0002-7863
 PB American Chemical Society
 DT Journal
 LA English
 OS CASREACT 134:322321
 IT 335629-09-9P 335629-19-1P 335629-21-5P
 RL: BPR (Biological process); BSU (Biological study, unclassified); PEP (Physical, engineering or chemical process); PRP (Properties); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation); PROC (Process)

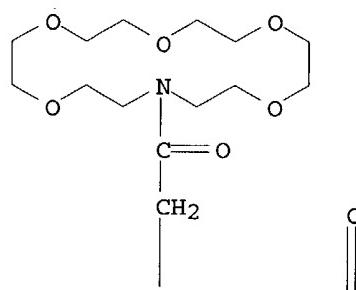
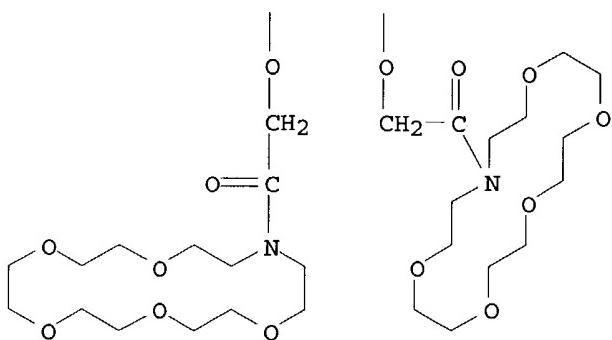
(electrostatics of cell membrane recognition: structure and activity of neutral and cationic rigid push-pull rods in isoelec., anionic, and polarized lipid bilayer membranes)

RN 335629-09-9 CAPLUS

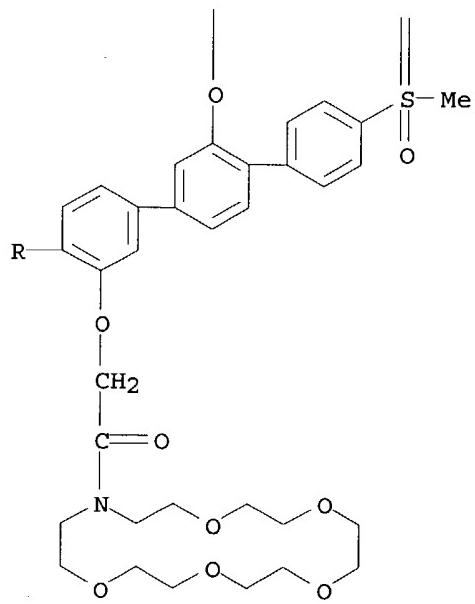
PAGE 1-A



PAGE 2-A



PAGE 3-A

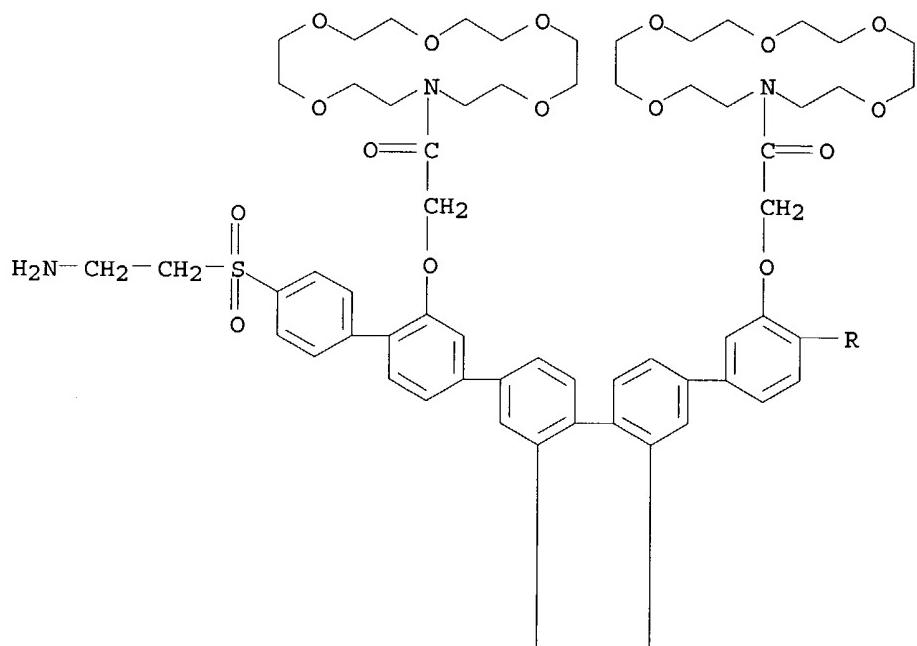


RN 335629-19-1 CAPLUS

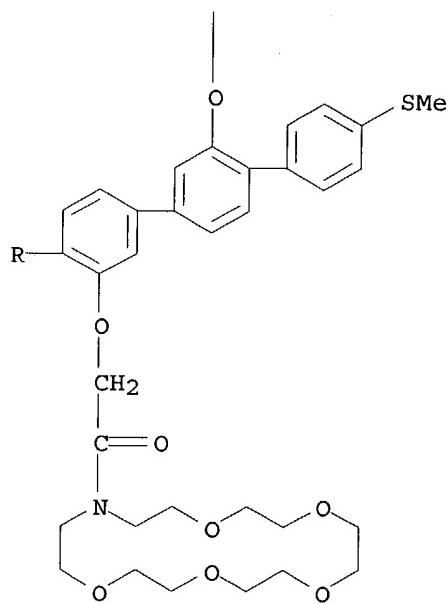
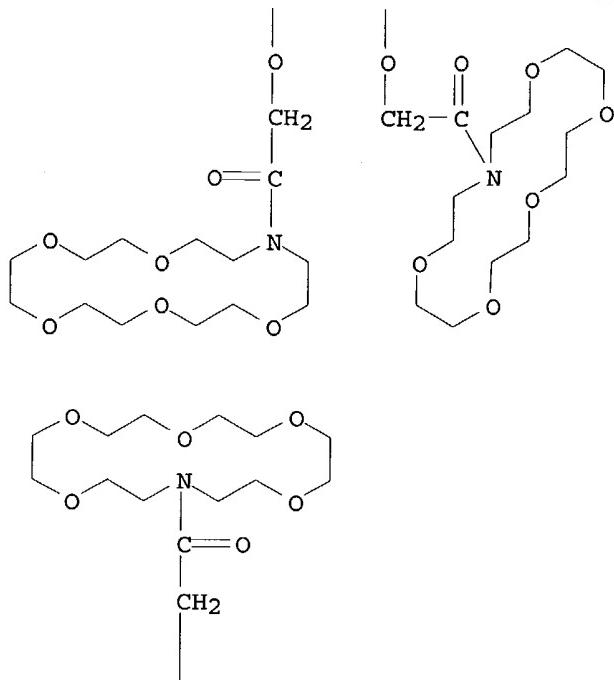
CN 1,4,7,10,13-Pentaoxa-16-azacyclooctadecane, 16,16',16'',16''',16'''',16'''''-[[4-[(2-aminoethyl)sulfonyl]-4''''''-(methylthio)[1,1':4',1'':4'',1'''':4''',1''''':4''''',1''''':4''''',1''''''-octiphenyl]-

2',2'',2''',2''''',3'',3''',3'''''-hexayl]hexakis [oxy(1-oxo-2,1-ethanediyl)]hexakis- (9CI) (CA INDEX NAME)

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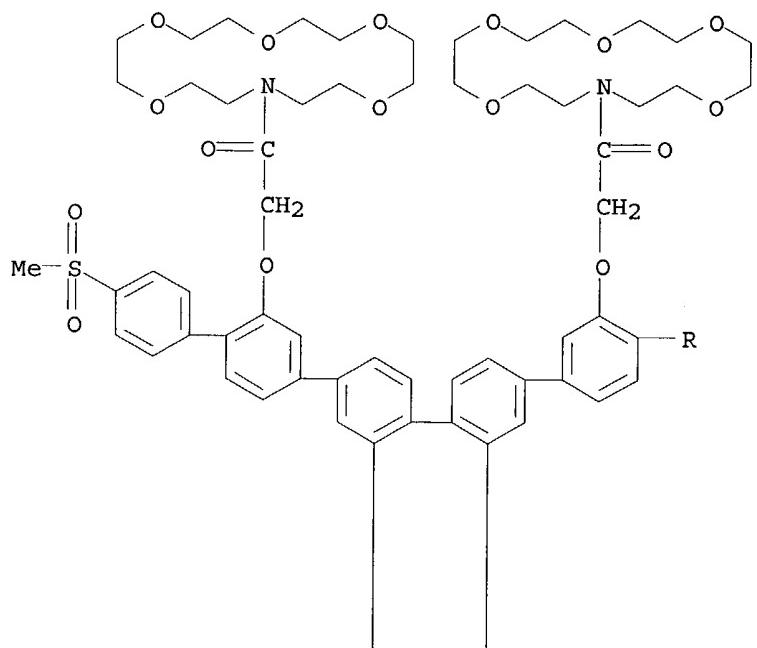


PAGE 3-A

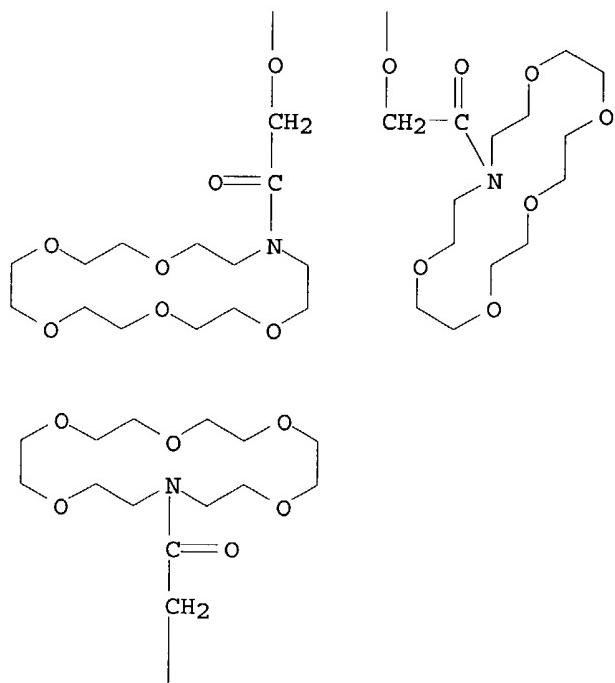
RN 335629-21-5 CAPIUS
 CN 1,4,7,10,13-Pentaoxa-16-azacyclooctadecane, 16,16',16'',16''',16'''',16'''''',16'''''-[[4-[(2-aminoethyl)thio]-4''''''-(methylsulfonyl)[1,1':4',1'':4'',1'''':4''',1'''''':4'''',1''''''':4'''',1''''''':4'''''',1''''''''-octiphenyl]-

2',2'',2''',2''''',3'',3''',3''''-hexayl]hexakis [oxy(1-oxo-2,1-ethanediyl)]hexakis- (9CI) (CA INDEX NAME)

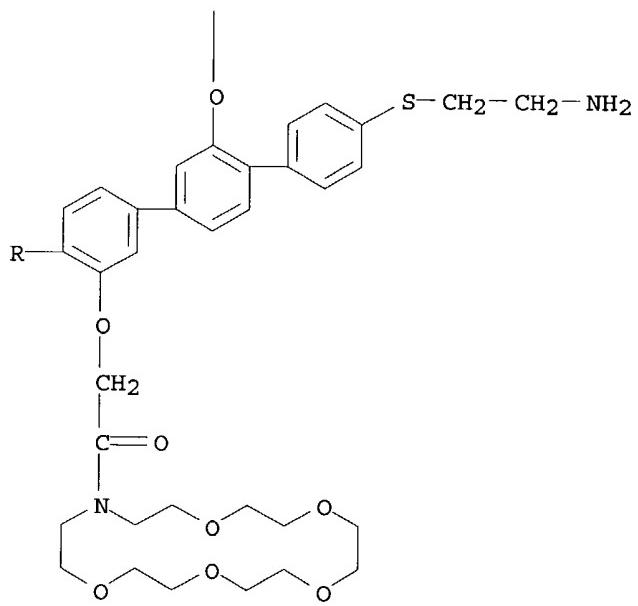
PAGE 1-A



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IT 335629-11-3P 335629-13-5P 335629-15-7P

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT
(Reactant or reagent)

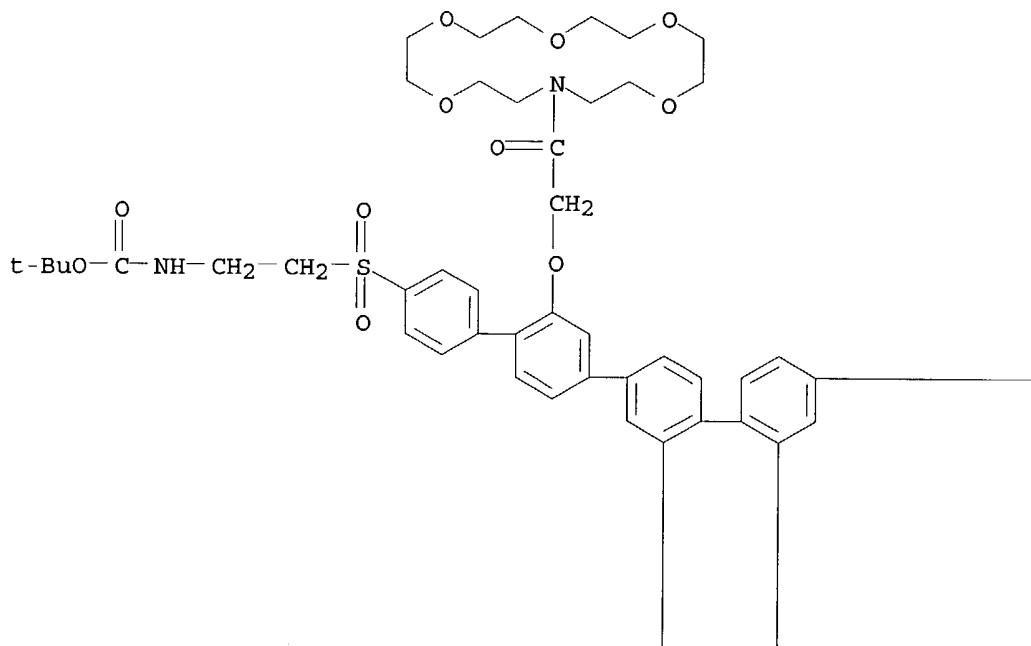
(electrostatics of cell membrane recognition: structure and activity of

neutral and cationic rigid push-pull rods in isoelec., anionic, and polarized lipid bilayer membranes)

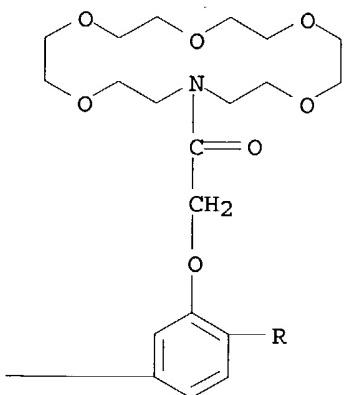
RN 335629-11-3 CAPLUS

CN Carbamic acid, [2-[[4''''''-(methylsulfonyl)-
2'',2''',2''''',3'',3'',3''''-hexakis[2-oxo-2-(1,4,7,10,13-pentaoxa-16-
azacyclooctadec-16-yl)ethoxy][1,1':4'',1'':4'',1'':4'',1'':4'',1'':4'',1'':4'',
1'':4'',1'':4'',1'':4''-octiphenyl]-4-yl]sulfonyl]ethyl]-,
1,1-dimethylethyl ester (9CI) (CA INDEX NAME)

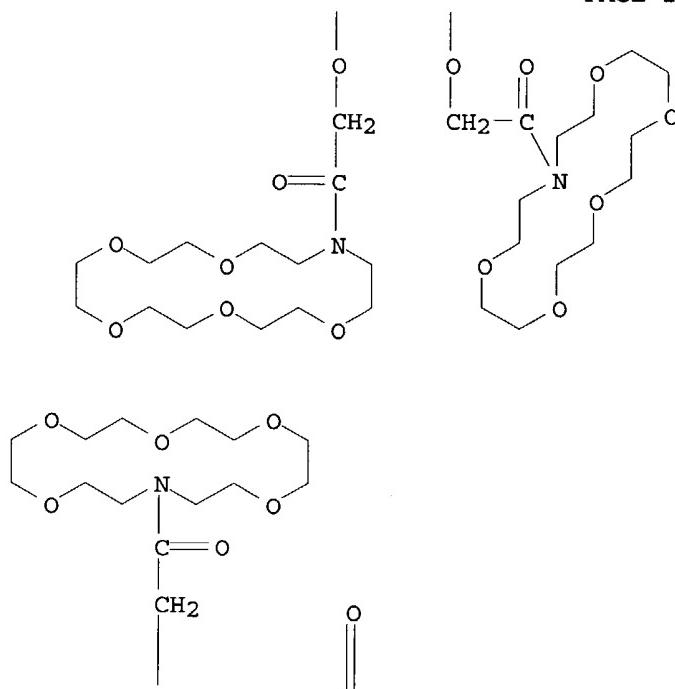
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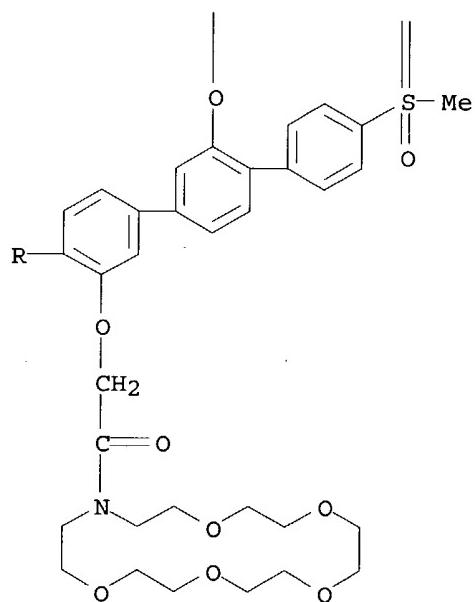
PAGE 1-B



PAGE 2-A



PAGE 3-A

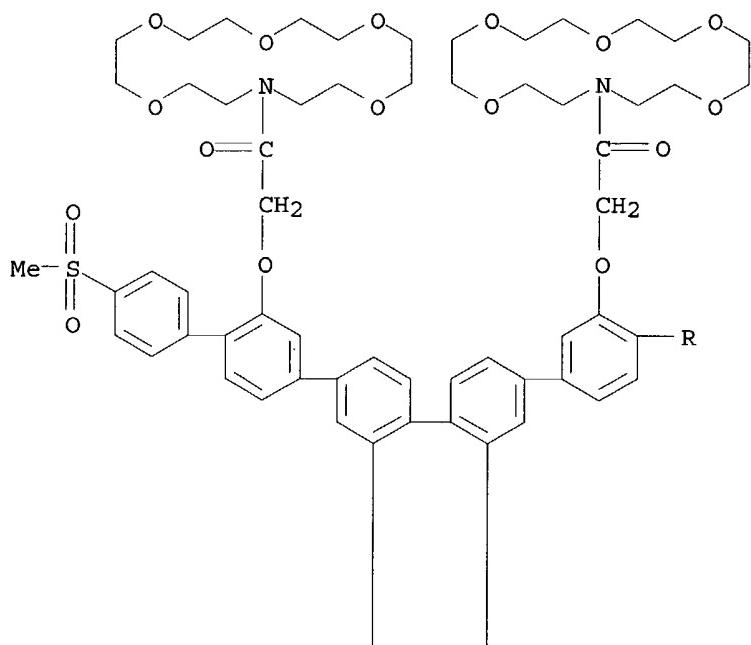


RN 335629-13-5 CAPLUS

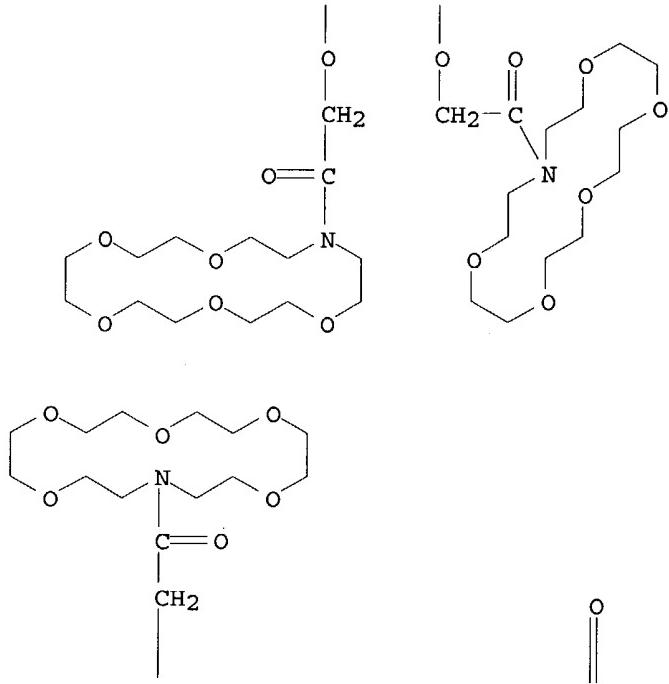
CN Carbamic acid, [2-[{[4''''''-(methylsulfonyl)-
2',2'',2''''',3'',3''''',3''''''-hexakis[2-oxo-2-(1,4,7,10,13-pentaoxa-16-
azacyclooctadec-16-yl)ethoxy] [1,1':4',1'':4'',1'''':4''',1''''':4''',1''''':
4''''',1''''':4''',1''''''-octiphenyl]-4-yl]thio]ethyl]-,

1,1-dimethylethyl ester (9CI) (CA INDEX NAME)

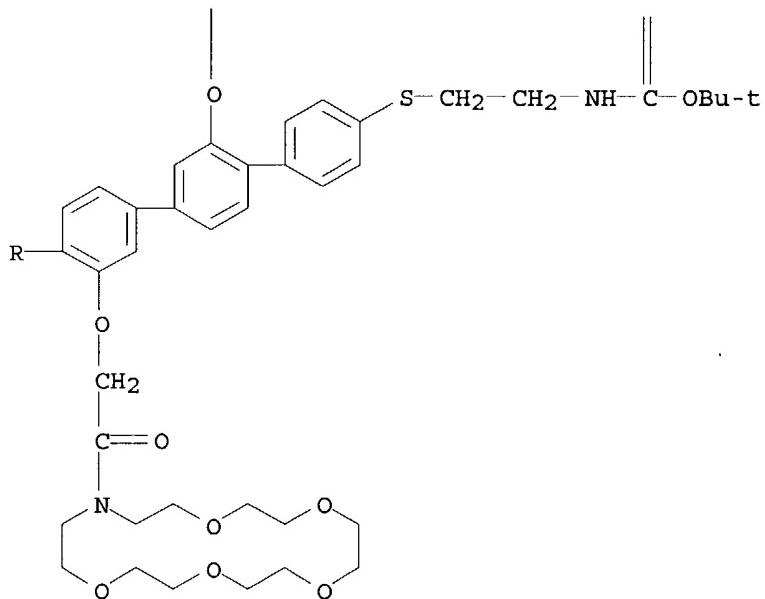
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PAGE 2-A



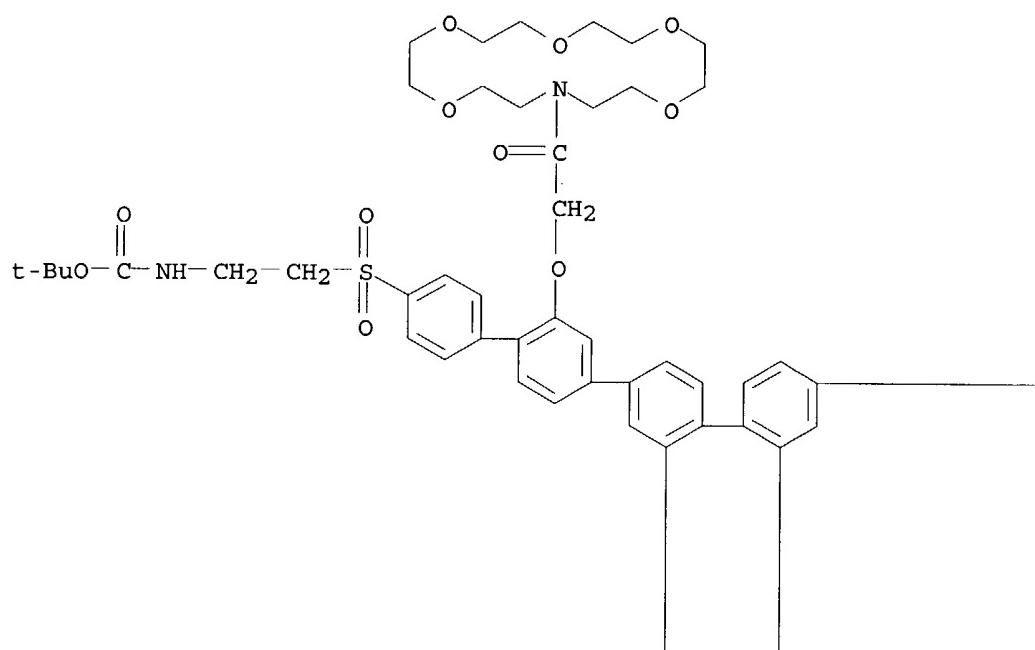
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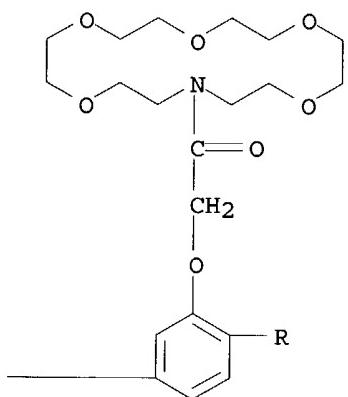
RN 335629-15-7 CAPLUS

CN Carbamic acid, [2-[4'-(methylthio)-2',2'',2''',3'',3''',3''''-hexakis[2-oxo-2-(1,4,7,10,13-pentaoxa-16-azacyclooctadec-16-yl)ethoxy][1,1':4',1'':4'',1'''':4''',1''''':4''',1''''':4''',1''''':4'']-1,1-dimethylethyl ester
(9CI) (CA INDEX NAME)

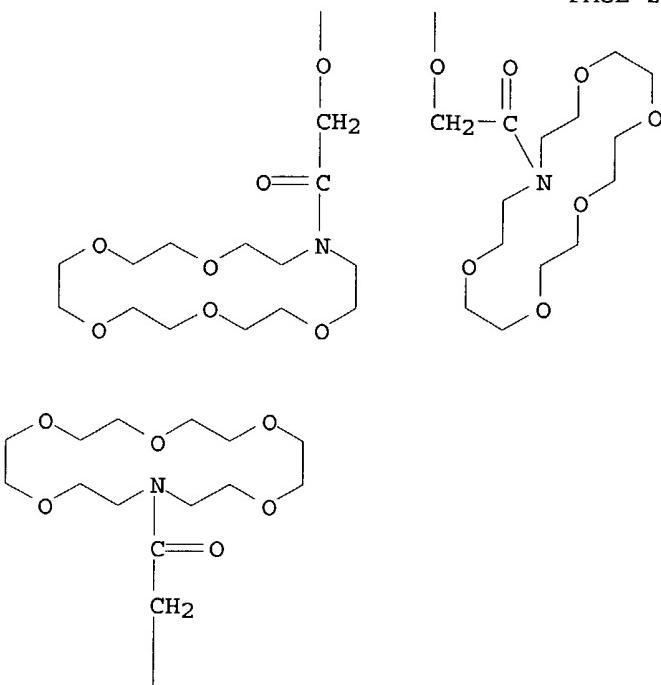
PAGE 1-A



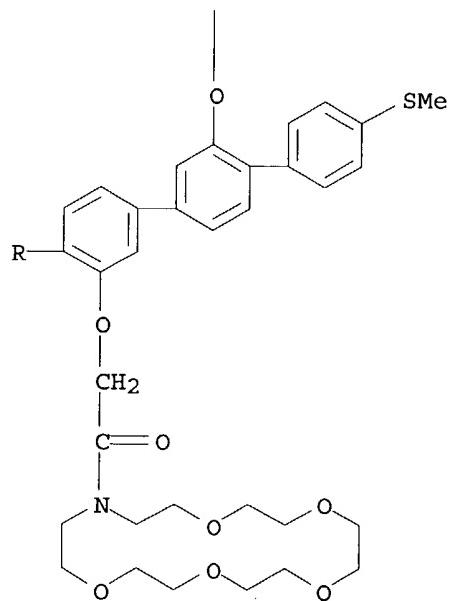
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PAGE 2-A



PAGE 3-A



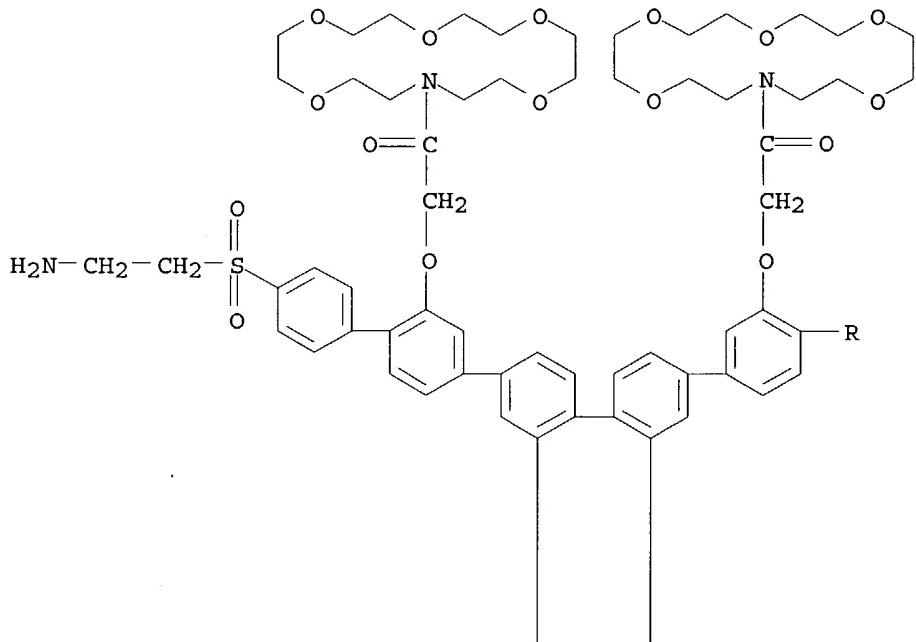
IT 335629-23-7P

RL: SPN (Synthetic preparation); PREP (Preparation)
(electrostatics of cell membrane recognition: structure and activity of
neutral and cationic rigid push-pull rods in isoelec., anionic, and
polarized lipid bilayer membranes)

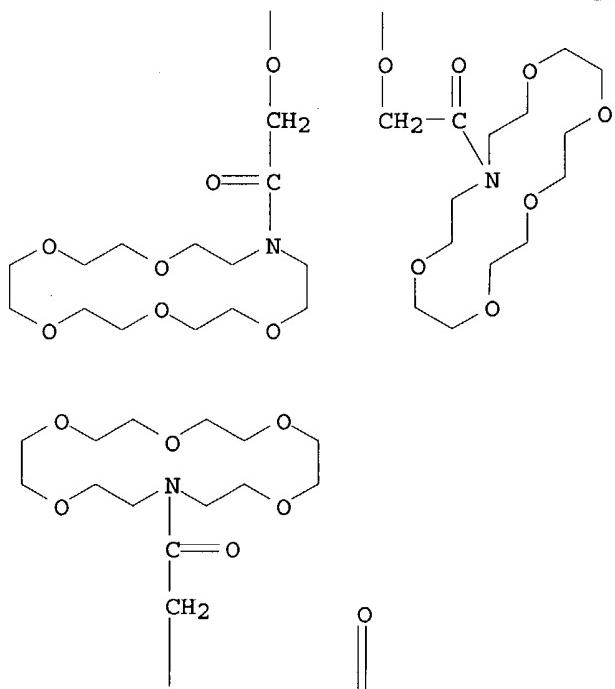
RN 335629-23-7 CAPLUS

CN 1,4,7,10,13-Pentaoxa-16-azacyclooctadecane, 16,16',16'',16''',16'''',16''''-[[4-[(2-aminoethyl)sulfonyl]-4''''-(methylsulfonyl)[1,1':4',1'':4'',1'''':4''',1''':4''',1'':4''',1'':4''',1'':4''-octiphenyl]-2',2'',2''',2''''',3',3'',3''''-hexayl]hexakis [oxy(1-oxo-2,1-ethanediyl)]hexakis- (9CI) (CA INDEX NAME)

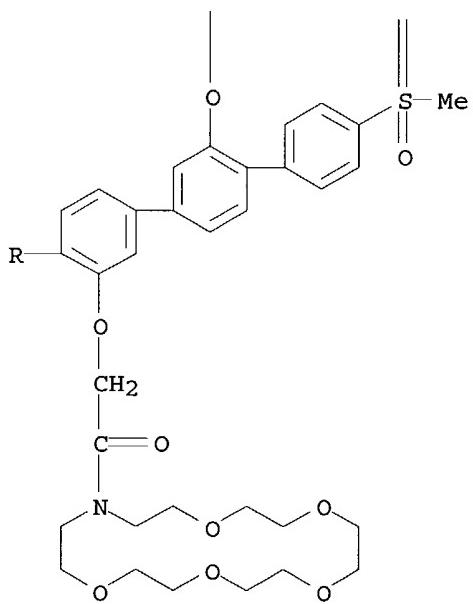
PAGE 1-A



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AB Design, synthesis, and structural and functional studies of rigid-rod ionophores of different axial electrostatic asymmetry are reported. The employed design strategy emphasized presence of (a) a rigid scaffold to minimize the conformational complexity, (b) a unimolar ion-conducting

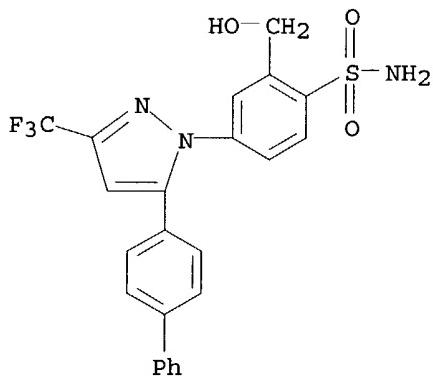
pathway to minimize the suprastructural complexity and monitor the function, (c) an extended fluorophore to monitor structure, (d) variable axial rod dipole, and (e) variable terminal charges to create axial asymmetry. Studies in isoelec., anionic, and polarized bilayer membranes confirmed a general increase in activity of uncharged rigid push-pull rods in polarized bilayers. The similarly increased activity of cationic rigid push-pull rods with an electrostatic asymmetry comparable to that of α -helical bee toxin melittin (pos. charge near neg. axial dipole terminus) is shown by fluorescence-depth quenching expts. to originate from the stabilization of transmembrane rod orientation by the membrane potential. The reduced activity of rigid push-pull rods having an electrostatic asymmetry comparable to that in α -helical natural antibiotics (a pos. charge near the pos. axial dipole terminus) is shown by structural studies to originate from rod "ejection" by membrane potentials comparable to that found in mammalian plasma membranes. This structural evidence for cell membrane recognition by asym. rods is unprecedented and of possible practical importance with regard to antibiotic resistance.

RE.CNT 54 THERE ARE 54 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

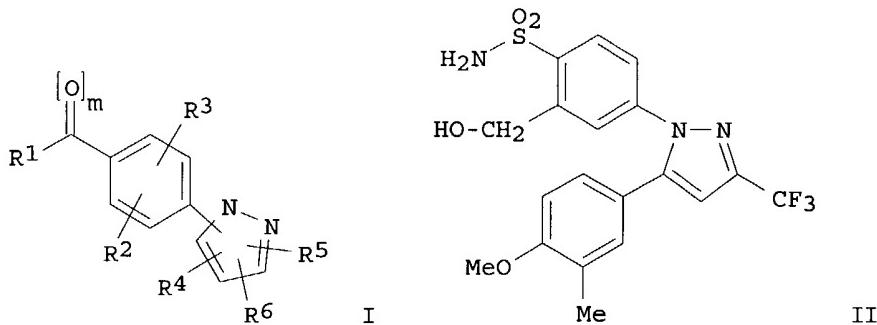
L3 ANSWER 17 OF 19 CAPLUS COPYRIGHT 2004 ACS on STN
AN 2000:790480 CAPLUS
DN 133:335232
TI Preparation of pyrazoles as antiinflammatory agents
IN Lohray, Vidya Bhushan; Sunil, Kumar Singh; Akella, Venkateswarlu; Lohray, Braj Bhushan; Pamulapati, Ganapathi Reddy; Ramanujam, Rajagopalan; Parimal, Misra
PA Reddy's Research Foundation, India
SO PCT Int. Appl., 134 pp.
CODEN: PIXXD2
DT Patent
LA English
FAN.CNT 1

| | PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|----|---------------|------|----------|---|------------|
| PI | WO 2000066562 | A1 | 20001109 | WO 2000-IB556 | 20000502 |
| | | | | W: AE, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CR, CU, CZ, DE, DK, DM, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ | |
| | | | | RW: GH, GM, KE, LS, MW, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG | |
| | | | | IN 1999-MA508 | A 19990503 |

OS MARPAT 133:335232
IT 304648-26-8P
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(preparation of pyrazoles as antiinflammatory agents)
RN 304648-26-8 CAPLUS
CN Benzenesulfonamide, 4-[5-[1,1'-biphenyl]-4-yl-3-(trifluoromethyl)-1H-pyrazol-1-yl]-2-(hydroxymethyl) - (9CI) (CA INDEX NAME)



GI



AB The title compds. [I; R1 = NH₂, alkyl, alkylamino, etc.; R2 = CN, NO₂, N₃, etc.; R3 = H, halo, OH, etc.; R4-R6 = H, halo, OH, etc.; m = 0-2], useful for the treatment and/or prophylaxis of diseases of cyclooxygenase, more particularly COX-2, were prepared E.g., a multi-step synthesis of the pyrazole II which showed IC₅₀ of 0.56 ± 0.03 (100 μM) against COX-2 vs. IC₅₀ of 264 ± 0.5 (100 μM) against COX-1, was given.

RE.CNT 5 THERE ARE 5 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L3 ANSWER 18 OF 19 CAPLUS COPYRIGHT 2004 ACS on STN
 AN 2000:756693 CAPLUS
 DN 133:309896
 TI Preparation of sulfonamide derivatives having oxadiazole rings as matrix metalloprotease inhibitors
 IN Watanabe, Fumihiro; Tamura, Yoshinori; Fujii, Yasuhiko
 PA Shionogi & Co., Ltd., Japan
 SO PCT Int. Appl., 47 pp.
 CODEN: PIXXD2
 DT Patent
 LA Japanese
 FAN.CNT 1

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|------------|-------|-------|-----------------|-------|
| ----- | ----- | ----- | ----- | ----- |

| | | | | | |
|----|--|----|----------|----------------|------------|
| PI | WO 2000063194 | A1 | 20001026 | WO 2000-JP2404 | 20000413 |
| | W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CR,
CU, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU,
ID, IL, IN, IS, JP, KE, KG, KR, KZ, LC, LK, LR, LS, LT, LU, LV,
MA, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG,
SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW,
AM, AZ, BY, KG, KZ, MD, RU, TJ, TM | | | | |
| | RW: GH, GM, KE, LS, MW, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE,
DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF,
CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG | | | | |
| | | | | JP 1999-110321 | A 19990419 |
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| | R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,
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| | | | | JP 1999-110321 | A 19990419 |
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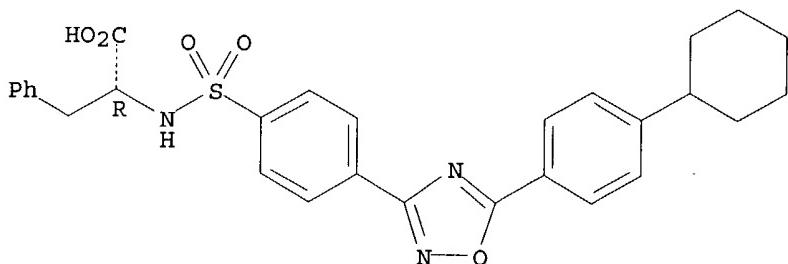
IT 301835-77-8P

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(preparation of sulfonamide derivs. having oxadiazole rings as matrix metalloprotease inhibitors)

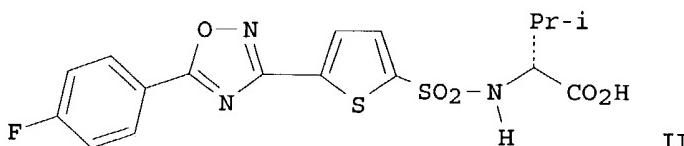
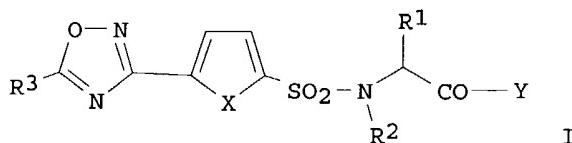
RN 301835-77-8 CAPLUS

CN D-Phenylalanine, N-[[4-[5-(4-cyclohexylphenyl)-1,2,4-oxadiazol-3-yl]phenyl]sulfonyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



GI



AB The title compds. I [R1 and R2 are each independently hydrogen, optionally substituted lower alkyl, or the like; R3 is optionally substituted aryl, optionally substituted heteroaryl, or the like; X is CH:CH, O, or S; and Y is NHOH, hydroxyl, or lower alkyloxy] are prepared. The title compound II in vitro showed IC50 of 0.067 μ M against MMP-2. Formulations are given.

RE.CNT 4 THERE ARE 4 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

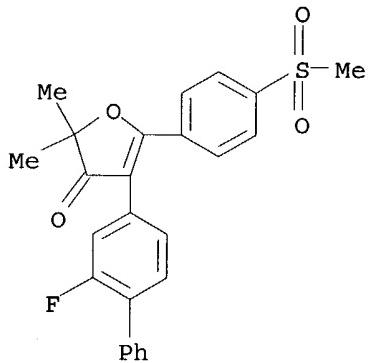
| L3 | ANSWER 19 OF 19 CAPLUS COPYRIGHT 2004 ACS on STN | | | |
|---|---|----------|---|--|
| AN | 2000:742084 CAPLUS | | | |
| DN | 133:309836 | | | |
| TI | Preparation of 4,5-diaryl-3(2H)-furanones as cyclooxygenase-2 inhibitors | | | |
| IN | Shin, Song Seok; Noh, Min-Soo; Byun, Young Joo; Choi, Jin Kyu; Kim, Jin Kwan; Lim, Kyung Min; Kim, Ji Young; Choi, Young Hoon; Ha, Jun-Yong; Lee, Ki-Wha; Moh, Joo Hyun; Jeong, Yeon Su; Chung, Shin; Joo, Yung Hyup; Lee, Chang Hoon; Kang, Seon Hwa; Park, Young-Ho; Yi, Jung Bum | | | |
| PA | Pacific Corporation, S. Korea | | | |
| SO | PCT Int. Appl., 240 pp. | | | |
| | CODEN: PIXXD2 | | | |
| DT | Patent | | | |
| LA | English | | | |
| FAN.CNT 1 | | | | |
| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
| ----- | ----- | ----- | ----- | ----- |
| PI WO 2000061571 | A1 | 20001019 | WO 2000-KR339 | 20000412 |
| W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CR, CU, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM | | | | |
| RW: GH, GM, KE, LS, MW, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG | | | KR 1999-13170
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A 20000404 |
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| EP 1109799 | A1 | 20010627 | EP 2000-921133 | 20000412 |
| EP 1109799 | B1 | 20031217 | | |
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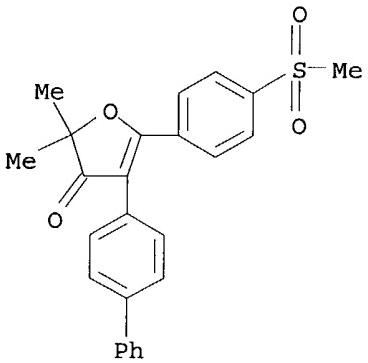
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| ZA 2001008089 | A | 20030102 | ZA 2001-8089 | 20011002 |
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| NO 2001004986 | A | 20011101 | NO 2001-4986 | 20011012 |
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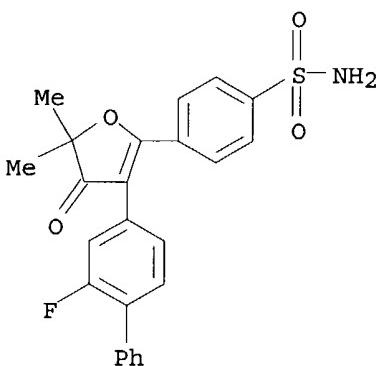
OS MARPAT 133:309836
IT **301690-35-7P 301691-71-4P 301693-02-7P**
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(preparation of 4,5-diaryl-3(2H)-furanones as cyclooxygenase-2 inhibitors)
RN 301690-35-7 CAPLUS
CN 3 (2H)-Furanone, 4-(2-fluoro[1,1'-biphenyl]-4-yl)-2,2-dimethyl-5-[4-(methylsulfonyl)phenyl]- (9CI) (CA INDEX NAME)



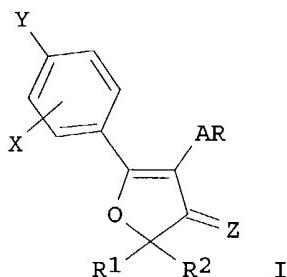
RN 301691-71-4 CAPLUS
CN 3 (2H)-Furanone, 4-[1,1'-biphenyl]-4-yl-2,2-dimethyl-5-[4-(methylsulfonyl)phenyl]- (9CI) (CA INDEX NAME)



RN 301693-02-7 CAPLUS
CN Benzenesulfonamide, 4-[3-(2-fluoro[1,1'-biphenyl]-4-yl)-4,5-dihydro-5,5-dimethyl-4-oxo-2-furanyl]- (9CI) (CA INDEX NAME)



GI



AB The title compds. [I; X = halo, H, alkyl; Y = alkylsulfonyl, aminosulfonyl, alkylsulfinyl, etc.; Z = O, S; R1, R2 = alkyl; R1 and R2, taken together with the 2-position carbon atom of 3(2H)-furanone ring, form a 4-6 membered aliphatic or heterocyclic ring; AR = (un)substituted aryl of 5-10 atoms] which inhibit strongly and selectively COX-2 over COX-1 (data given), and are useful in treating inflammation, inflammation-associated disorders, and COX-2 mediated diseases, were prepared. Thus, reacting 4-bromo-2,2-dimethyl-5-{4-(methylsulfonyl)phenyl}-3(2H)-furanone (preparation given) with 3-fluorobenzeneboronic acid in the presence of Pd(PPh₃)₄ and saturated aqueous NaHCO₃ in PhMe and EtOH afforded I [X = H;

Y =

SO₂Me; Z = O; R1, R2 = Me; AR = 3-FC₆H₄] which showed IC₅₀ of 0.02 µg/mL against COX-2 vs. IC₅₀ of 5 µg/mL against COX-1.

RE.CNT 4 THERE ARE 4 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

=> s 13 and prostagladin
L4 0 L3 AND PROSTAGLADIN

=> log y
COST IN U.S. DOLLARS

| | SINCE FILE | TOTAL |
|---------------------|------------|---------|
| | ENTRY | SESSION |
| FULL ESTIMATED COST | 92.70 | 248.33 |

DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS) SINCE FILE TOTAL